NYC Fire Pension Fund Investment Meeting (Public)

Schedule	Monday, September 18, 2023 9:30 AM — 1:30 PM EDT
Venue	Zoom Meeting (+ In Person)
Description	Location: 1 Battery Park Plaza – 9th Floor, Manhattan, NY 10004
Organizer	Kim Boston

Agenda

PUBLIC AGENDA -

Welcome and Opening

Quarterly Presentation (Public):

-Market Overview

-Performance Update

-Risk Update

Invitation to Join Labor Rights Investor Network:

About the Labour Rights Investor Network: An Education and Exchange Platform on Freedom of Association and Collective Bargaining

What is the Labour Rights Investor Network?

The ‘Labour Rights Investor Network’ is a global investor network focusing on the rights to freedom of association and collective bargaining. The Network assists investors by acting as an education and exchange platform and a place to connect on issues related to freedom of association and collective bargaining.

The Network is composed of investors who commit to integrating labour rights into their stewardship practices, as outlined in the Investor Statement on the Rights to Freedom of Association and Collective Bargaining. The Network is open to asset managers, asset owners and other investment service providers.

What will the Network do?

The Coordinating Committee (detailed below) will facilitate knowledge building by providing resources and activities to meet the needs identified by members. This could include information about legal frameworks and risks related to freedom of association and collective bargaining, individual companies’ practices, sector-wide risks, or relevant policy developments. In addition, the Coordinating Committee may also undertake activities to support individual members or groups of members when it is relevant to do so. Membership in the Network does not require participation in any particular activity, including any engagements. Members can opt in to chosen activities of interest.

After the initial year and as the Network progresses, the Coordinating Committee will consult with the investor members regarding the Network, including its governance structure and its activities.

Build knowledge on freedom of association and collective bargaining

The Coordinating Committee will organise the activities of the Network and provide practical resources to help advance investor knowledge of freedom of association and collective bargaining, so that investors can apply this understanding of the topic to strengthen stewardship activities.

Resources will include:

- Information about trade unions and the rights to freedom of association and collective bargaining;
- Practical workshops on responding to engagement challenges;
- Education sessions focused on particular geographies, sectors, or themes;
- Written resources that can be utilised by members in stewardship and internal engagements.

Provide information on company-level risks

The Labour Rights Investor Network will act as a platform through which members receive public information from other investors and trade unions globally regarding issues related to freedom of association and collective bargaining at specific companies or industries. The Coordinating Committee will not coordinate collaborative company engagement activities but will share and support relevant company engagement activities organised by members or other groups. The Coordinating Committee may also help support members in evaluating company statements.

Facilitate members embedding labour rights in the investment chain

Where there is member interest, the Network will support activities to incorporate freedom of association and collective bargaining throughout the investment chain. For example, the Network can facilitate sharing good practices on how to incorporate labour rights in engagement with service providers, such as ESG rating agencies or asset managers. The Network can also inform and support members participating in relevant policy consultations that shape company or investor activities in relation to freedom of association and collective bargaining.

What does it mean to be a member?

Expectations of members

By joining the Network, members commit to:

- Publicly endorse the Investor Statement on the Rights to Freedom of Association and Collective Bargaining by adding their organisation's name. This statement will be public on the Network's webpage, hosted on the Global Unions' Committee on Workers' Capital (CWC) (detailed below) website.
- Join regular Network meetings.
- Engage with the Network's resources and events.
- Work to incorporate labour rights into their engagement and stewardship activities.
- Promote labour rights and the Network itself where there are opportunities to do so.

Members are prohibited from sharing confidential, proprietary or material non–public information. If a network member inadvertently receives information believed to be material non-public information, then the requirements under the relevant securities laws apply.

Network members are invited to show leadership within the Network on the stewardship of labour rights, including leading relevant workstreams of interest. Members are encouraged to provide input into the activities of the Network.

How to join the Network?

If an investor has questions and would like to discuss the Network they should contact the Coordinating Committee detailed below.

To join the Network, the investor agrees to:

- Provide the Coordinating Committee with their organisation's current assets under management and the name and contact information of their representative for purposes of Network communications and activities. Members may be contacted by any member of the Coordinating Committee listed below.
- Act in line with and fulfil the expectations outlined in this document.
- Be listed publicly, unless an investor member requests otherwise. Assets under management will only be disclosed in aggregate.

Leaving the Network

Investors can join the Network on an ongoing basis, for an indefinite amount of time. If a member would like to leave the Network at any time, for any reason, they should contact the Coordinating Committee. The member's name will then be removed from the online version of the investor statement. Should there be a significant change in the running, structure or activities of the Network, as detailed in this document, all investor members will be consulted.

What is the governance of the Network?

The Network will be coordinated by the Global Unions' Committee on Workers' Capital (CWC), with the support of a Coordinating Committee of CWC participant organisations.

Coordinating Committee responsibilities

- Coordinate regular Network meetings for members, provide agendas and chair meetings.
- Develop and organise a programme of knowledge-sharing and capacity-building resources and activities for members by drawing on expertise and capabilities within and beyond the global trade union movement and other investor members.
- Offer interested members expertise and support on labour rights, including by drawing on a global network of labour rights experts.
- Promote the Network, including engaging with prospective members and organising opportunities for public communication. The Coordinating Committee is able to speak on behalf of the Network, but will not speak directly on behalf of individual investors or use names in communications without specific permission from the investor to do so.
- Provide space for unions and investors to exchange information related to labour rights.
- Seek input and feedback from investor members on activities and the running of the network.

Network Coordinating Committee

The following organisations are represented on the Coordinating Committee.

- **UNI Global Union -** UNI Global Union is the global trade union federation for the skills and services sectors, representing more than 20 million workers across 150 different countries. UNI Global Union's investor engagement team works with investors to support their engagement and stewardship with companies and across sub-sectors in the services sectors. UNI has also worked extensively in supporting investors to advance their knowledge, policy and practice on labour rights.

- **UFCW -** The United Food and Commercial Workers International Union (UFCW) represents 1.3 million workers in the U.S. and Canada in the food retail, food processing, and non-food retail industries. UFCW's capital stewardship department supports investor engagement with companies to drive more sustainable returns.

- **AFL-CIO -** The American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) is a federation of 60 national and international labour unions that represent 12.5 million working people. The AFL-CIO's Capital Stewardship Program seeks to ensure that retirement and employee benefit funds invested on behalf of working people are invested and managed in their long-term best interests.

- **SOC Investment Group -** The SOC Investment Group works with pension funds sponsored by unions affiliated with the Strategic Organizing Center (SOC), a coalition of unions representing millions of members, to enhance long-term shareholder value through active ownership. These funds have over $250 billion in assets under management. The SOC Investment Group supports shareholder initiatives to ensure director accountability, sound human rights practices, and strong governance policies, reflecting the long-term interests of workers and their families invested in union pension funds.

- **CWC Secretariat -** The Global Unions' Committee on Workers' Capital (CWC) is an international labour network of over 600 labour representatives and asset owner board members that advocate for the responsible investment of workers' retirement savings. Founded over 20 years ago, it is a joint initiative of the International Trade Union Confederation, the Global Union Federations and the Trade Union Advisory Committee to the OECD. The Secretariat of the CWC is housed at the Shareholder Association for Research and Education (SHARE) in Canada.

Investor Statement on the Rights to Freedom of Association and Collective Bargaining

The undersigned investors and fiduciaries representing [XX] institutions and [XX] in combined assets under management or advice are writing to express our expectations regarding the rights to freedom of association and collective bargaining.

Labour rights are human rights.[1] The rights to freedom of association and collective bargaining are fundamental pillars of human freedom, established in the International Labour Organization Core Conventions, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and the UN Sustainable Development Goals. These rights guarantee that individual workers can join together in protected concerted workplace activity to better their working lives, improve the companies they work for, and contribute to the advancement of society.

Companies that respect labour rights reap many benefits, such as greater productivity, safer workplaces, and improved employee engagement.[2] Implementing labour rights requires varied approaches across different businesses, regions, and jurisdictions. The undersigned investors agree to three requests to boards and senior management at investee companies:

- Implement a strong governance framework that articulates the board's responsibility for oversight of labour rights based on ILO Core Conventions.
- Take action to respect workers' exercise of their fundamental rights to freedom of association and collective bargaining, for example, but not limited to: adopting labour rights due diligence processes, training management at all levels to meet labour rights standards, and committing to non-interference when workers seek to form or join unions.
- Provide enhanced disclosure of labour rights-related metrics – for example, but not limited to: percentage of workers covered by collective bargaining agreements, pending litigation and regulatory investigations regarding alleged labour rights violations, and any expenditure of company resources on union avoidance activities – which allow investors to assess company labour risk.

We encourage and welcome other investors and their representatives to join us in signing this statement.

[1]International Labour Organization (ILO) Core Conventions and the ILO Declaration on Fundamental Principles and Rights at Work: ILO, Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87), https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312232; ILO, Right to Organize and Collective Bargaining Convention, 1949 (No. 98), https://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO::P12100_INSTRUMENT_ID,P12100_LANG_CODE:312243,en:NO; ILO, ILO Declaration on Fundamental Principles and Rights at Work and its Follow-Up (adopted 1998, amended 2022), https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/normativeinstrument/wcms_716594.pdf; United Nations Guiding Principles on Business and Human Rights (UNGPs); Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises (MNEs); United Nations Universal Declaration of Human Rights; UN Sustainable Development Goals, Goal 8.

[2]See text and citations of Global Unions' Committee on Workers' Capital, *Shared Prosperity: The Investor Case for Freedom of Association and Collective Bargaining* (November 2022), https://www.workerscapital.org/our-resources/shared prosperity-the-investor-case-for-freedom-of-association-and-collective-bargaining/.

Strategic Asset Allocation Discussion:

NYC FIRE PENSION

NEPC ASSET ALLOCATION DISCUSSION & RECOMMENDATION

SEPTEMBER 18, 2023

Doug Moseley, Partner
Scott Driscoll, Consultant
Jack Yuan, Investment Director, Asset Allocation

INTRODUCTION

ASSET CLASS ASSUMPTIONS

OVERVIEW

- **NEPC's capital market assumptions are available each quarter and reflect June 30, 2023 market data**
- **Higher interest rates have lifted fixed income return expectations, while equity valuation expansion has weighed on future returns**
- **Public fixed income returns offer an increasingly attractive risk-return profile relative to public equities**
- **Inflation modeling enhancements raised return expectations for asset classes directly tied to changes in the U.S. Consumer Price Index (CPI)**
- **NEPC's expectation for inflation is elevated over the near-term, but the long-term outlook reflects a more stable inflation environment consistent with the Federal Reserve target of 2-3%**

ASSET CLASS ASSUMPTIONS - BACKGROUND

DEVELOPMENT

- **Assumptions are published for over 70 asset classes**
  - NEPC publishes return forecasts for 10-year and 30-year periods
- **Market data as of 06/30/2023**
  - Assumptions are developed with NEPC valuations models and rely on a building block approach
- **The 10-year return outlook is intended to support strategic asset allocation analysis**
- **30-year return assumptions are used for actuarial inputs and long-term planning**

Asset Allocation Process

1. Finalize list of new asset classes
2. Calculate asset class volatility and correlation assumptions
3. Set model terminal values, growth, and inflation inputs
4. Model data updated at quarter-end
5. Review model outputs and produce asset class return assumptions
6. Assumptions released on the 15th calendar day after quarter-end

CORE ASSET CLASS RETURN ASSUMPTIONS

	Asset Class	06/30/23 10-Year Return	12/31/22 10-Year Return	Delta
	Cash	4.0%	4.0%	na
	U.S. Inflation	2.7%	2.5%	+0.2%
Equity	U.S. Large-Cap Equity	4.6%	5.4%	-0.8%
Equity	Non-U.S. Developed Equity	5.0%	5.6%	-0.6%
Equity	Emerging Market Equity	9.2%	9.6%	-0.4%
Equity	Global Equity*	5.7%	6.3%	-0.6%
Equity	Private Equity*	9.1%	9.2%	-0.1%
Fixed Income	U.S. Treasury Bond	4.2%	4.2%	na
Fixed Income	U.S. Municipal Bond	4.1%	4.4%	-0.3%
Fixed Income	U.S. Aggregate Bond*	4.7%	4.8%	-0.1%
Fixed Income	U.S. TIPS	4.6%	4.4%	+0.2%
Fixed Income	U.S. High Yield Corporate Bond	6.8%	7.1%	-0.3%
Fixed Income	Private Debt*	8.6%	8.8%	-0.2%
Real Assets	Commodity Futures	4.8%	4.2%	+0.6%
Real Assets	REIT	6.4%	6.2%	+0.2%
Real Assets	Real Estate - Core	5.3%	4.0%	+1.3%
Real Assets	Real Estate – Non -Core	6.7%	5.3%	+1.4%
Real Assets	Private Real Assets - Infrastructure	6.3%	6.6%	-0.3%
Multi-Asset	60% S&P 500 & 40% U.S. Aggregate	4.9%	5.4%	-0.5%
Multi-Asset	60% MSCI ACWI & 40% U.S. Agg.	5.6%	6.0%	-0.4%
Multi-Asset	Hedge Fund*	6.3%	6.5%	-0.2%

*Calculated as a blend of other asset classes

NEPC ASSET ALLOCATION FRAMEWORK

A MULTI-DIMENSIONAL APPROACH TO ASSET ALLOCATION

STRATEGIC VIEWS
Long-term

Serves as an implementation guide for strategic asset allocation targets and investment policy benchmarks

CURRENT OPPORTUNITIES
Intermediate

Recommended actions to improve investment outcomes relative to strategic asset allocation targets

DYNAMIC TILTS
Short-term
(<24 Months)

Represent an active tilt for public market asset classes relative to strategic asset allocation targets

DYNAMIC TILTS

PURPOSE AND GOAL

- **Dynamic Tilts reflect active views for public market asset classes with a time horizon less than 24 months**
- **The asset class tilts represent an active view layered over strategic asset allocation targets**
- **Dynamic Tilts provide guidance to deploy excess portfolio cash and to reinforce market opportunities**
- **Ratings are reviewed monthly by the Asset Allocation Committee**

Rating	Description
ADD	Directed portfolio action to increase asset class exposure
FAVORABLE	Ratings indicate NEPC's near-term asset class preferences and not designed to be a directed portfolio action
NEUTRAL	
UNFAVORABLE	
REDUCE	Directed portfolio action to reduce asset class exposure

NEPC DYNAMIC ASSET ALLOCATION OUTLOOK

- We recommend **reducing S&P 500 and U.S. mega-cap equity exposure**, while maintaining U.S. value positions
- Evaluate the risk-return benefit of fixed income; **we suggest increasing exposure to U.S. high yield** given a greater expected return relative to U.S. large-cap equity
- Look to **hold greater levels of cash** within safe-haven fixed income to target opportunistic investments that may arise in the coming years

ASSET CLASS	DYNAMIC TILT	COMMENTS
Public Equity	*Unfavorable*	We recommend increasing credit exposure relative to U.S. large cap equities and advocate for investors to increase allocations to higher carry assets, including U.S. high yield bonds and cash
Safe-Haven Fixed Income	*Neutral*	
High-Quality Fixed Income	*Neutral*	
Return-Seeking Credit	*Favorable*	
Public Real Assets	*Neutral*	

REDUCE	UNFAVORABLE	NEUTRAL	FAVORABLE	ADD

Shaded diagonal ratings reflect the asset class ratings for the previous month.

NEPC RETURN-SEEKING CREDIT OUTLOOK

- We believe **U.S. high yield bonds offer a greater return** relative to U.S. large-cap equity and we recommend increasing credit exposure
- **The strategic view for return-seeking credit** recommends the use of high yield debt as the opportunity cost as it is the most efficient long-term beta exposure
- **Implementation Outlook:** We favor bonds relative to loans due to the funding environment and larger quality bias relative to underwriting standards

SUB-ASSET CLASS	DYNAMIC TILT	COMMENTS
U.S. High Yield	*Add*	Return-seeking credit continues to offer attractive all-in yields; we suggest adding U.S. high yield bond exposure
Levered Loans	*Neutral*	
Emerging Market Debt	*Unfavorable*	

REDUCE | UNFAVORABLE | NEUTRAL | FAVORABLE | ADD

Shaded diagonal ratings reflect the asset class ratings for the previous month.

PORTFOLIO MIXES

KEY THOUGHTS FOR BAM & NYC FIRE

- **NEPC's assumptions and optimization work points to following:**
  - Increasing exposure to credit via High Yield, OFI and IG Corp.
  - Increasing exposure to Private Infrastructure by 1-3%
- **While not driven by modeling, NEPC recommends increasing private equity target to at least 10%**
  - Assumptions used for return and risk are relatively conservative
  - NYCRS program has been successful with manager access, selection, lowering fees
- **NEPC believes that NYC Fire should increase exposure to Hedge Funds and maintain Real Estate target at current level**
- **Recommend Board adopt Policy Mix B**
  - Primary sourcing for Policy increases should come from reduction to US Equities, US Mortgage and US Treasuries
  - Mix B will increase exposure to Basket asset categories by 7%

PORTFOLIO MIXES

	Current Policy	Mix A	Mix B	Mix C
Total Cash	**0%**	**0.5%**	**0.5%**	**0.5%**
US Large-Cap Equity	24%	19%	19%	19%
US Small/Mid-Cap Equity	3%	3%	3%	3%
Non-US Developed Equity	9%	9%	9%	9%
Emerging Market Equity	6%	6%	6%	6%
Private Equity	8%	10%	10%	10%
Total Equity	**50%**	**47.0%**	**47.0%**	**47.0%**
US TIPS	4%	2%	0%	0%
US Treasury Bond	12%	9.5%	10.5%	9.5%
US Corporate Bond	4%	6%	6%	6%
US Mortgage-Backed Securities	5%	3%	4%	4%
US High Yield Corporate Bond	6%	8%	8%	8%
Private Debt (NYC OFI)	4%	6%	6%	6%
Total Fixed Income	**35%**	**34.5%**	**34.5%**	**33.5%**
Real Estate - Core & Non-Core	7%	7%	7%	7%
Private Real Assets - Infrastructure	3%	5%	5%	5%
Total Real Assets	**10%**	**12.0%**	**12.0%**	**12.0%**
Hedge Fund	5%	6%	6%	7%
Total Multi Asset	**5%**	**6.0%**	**6.0%**	**7.0%**
Expected Return 10 yrs	**6.40%**	**6.69%**	**6.69%**	**6.70%**
Expected Return 30 yrs	**7.28%**	**7.52%**	**7.52%**	**7.53%**
Standard Dev (Risk)	**11.92%**	**12.29%**	**12.30%**	**12.39%**
Sharpe Ratio (30 years)	**0.325**	**0.335**	**0.334**	**0.333**
Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**

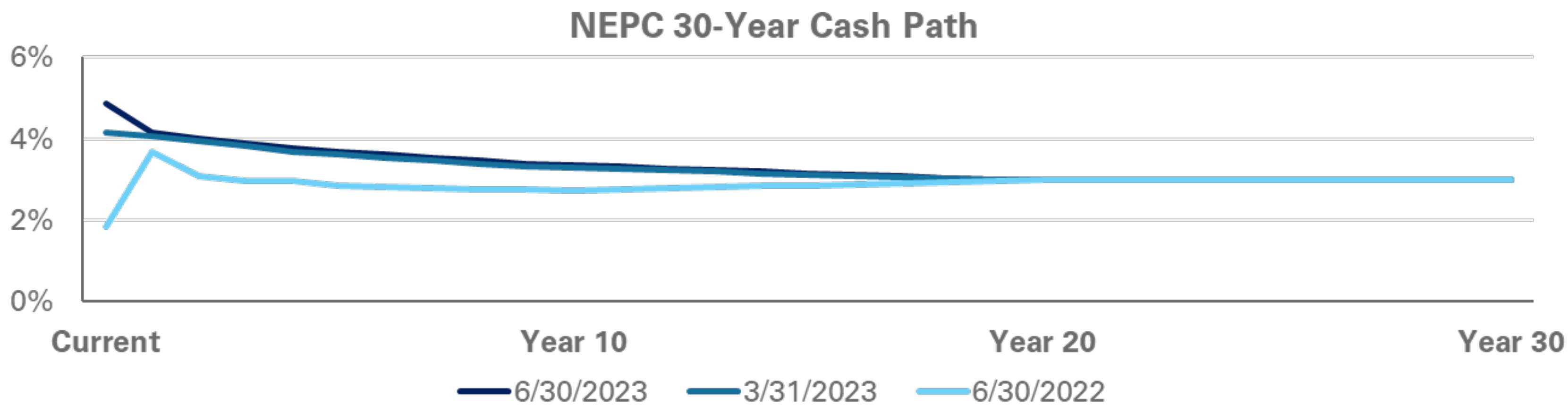
APPENDIX – ASSUMPTION DETAIL

ASSET CLASS BUILDING BLOCKS

METHODOLOGY

- **Asset models reflect current and forecasted market data to inform expected returns**
- **Systematic inputs are paired with a long-term trend to terminal values**
- **Model inputs are aggregated to capture key return drivers for each asset class**
- **Building block inputs will differ across asset class categories**

U.S. CASH
EXPECTATIONS



- **Cash is a foundational input for all asset class return expectations**
  – Cash + risk premia is an input for long-term asset class return projections
- **Cash assumptions reflect inflation and real interest rates**
- **U.S. nominal rate forecasts reflect continued tighter policy in the near-term, but long-term expectations remain subdued relative to history**

Sources: Bloomberg, FactSet, NEPC

ASSUMPTIONS PROCESS ENHANCEMENTS

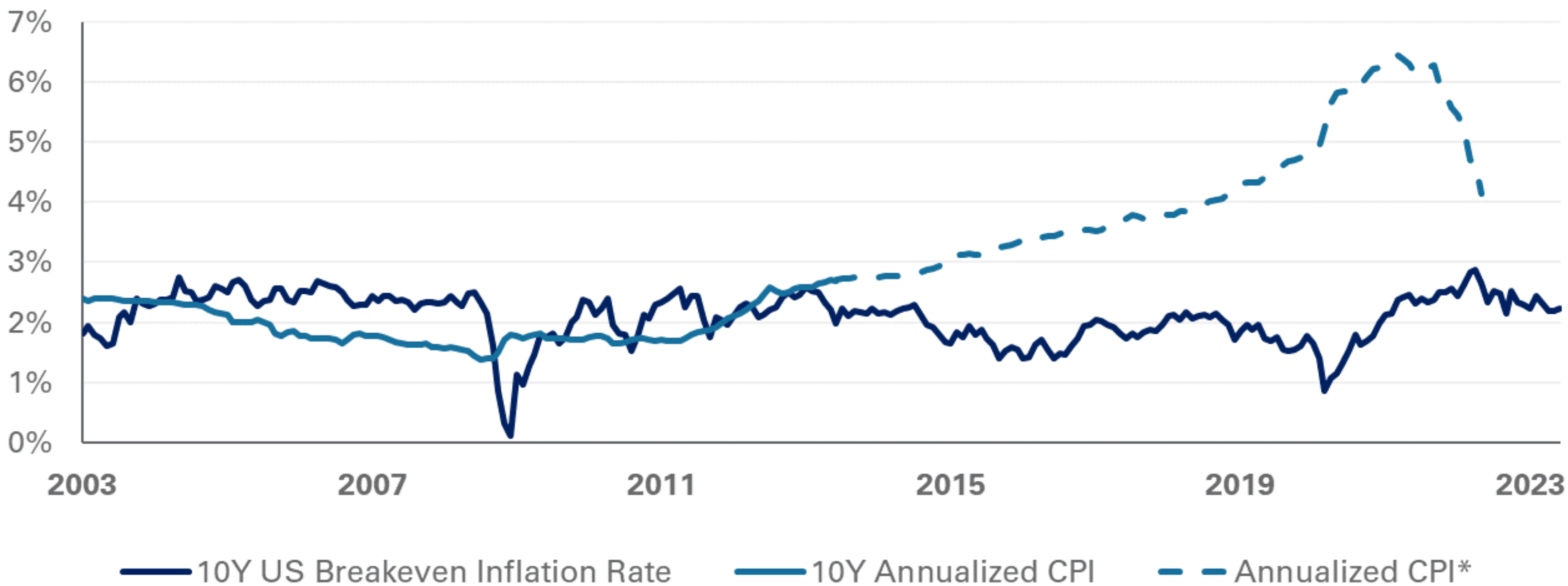
- **NEPC's inflation forecasts were adjusted to better approximate an expected path for the U.S. Consumer Price Index (CPI)**
  - Breakeven inflation expectations previously informed NEPC's inflation path, but they have consistently diverged from realized CPI

- **Breakeven inflation rates are disconnected with inflation and NEPC's inflation model enhancements are designed to more closely mirror CPI**
  - U.S. breakeven inflation rates remain well below realized inflation and do not pass through the impact of higher inflation rates on return assumptions

- **NEPC's inflation forecast now directly models major CPI components, including food, energy, services, and shelter**
  - This methodology is designed to provide a more detailed profile of inflation dynamics, including the various calculation methods associated with CPI

- **The change in methodology does not reflect a shift in NEPC's inflation views – it is intended to improve how changes in inflation impact asset class return expectations**

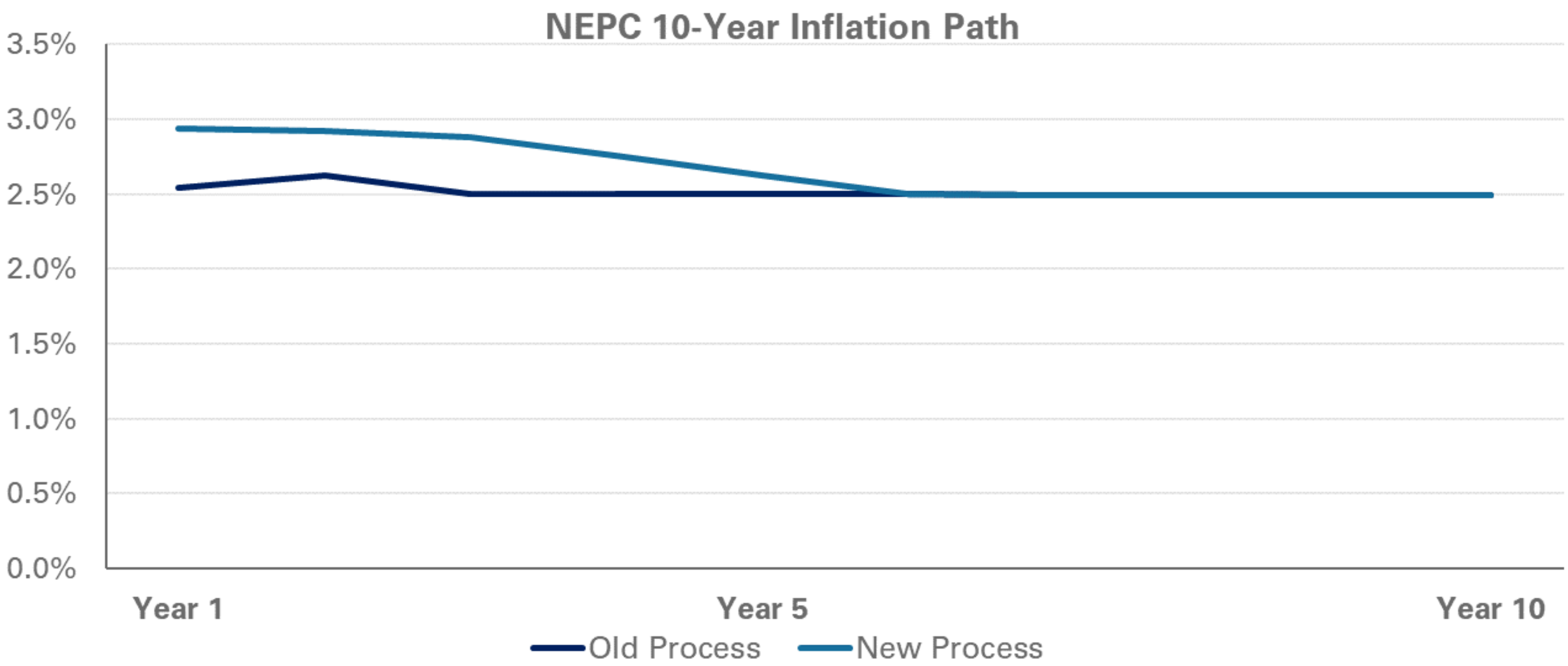
INFLATION MODEL ENHANCEMENTS



- **Enhancements to NEPC's inflation forecast will only impact asset classes with exposure to U.S. CPI**
  - Equity and real asset return expectations improved as higher inflation rates boost nominal earnings growth
  - U.S. TIPS and Global Inflation-Linked bond principal inflation adjustments increased, reflecting the higher CPI path

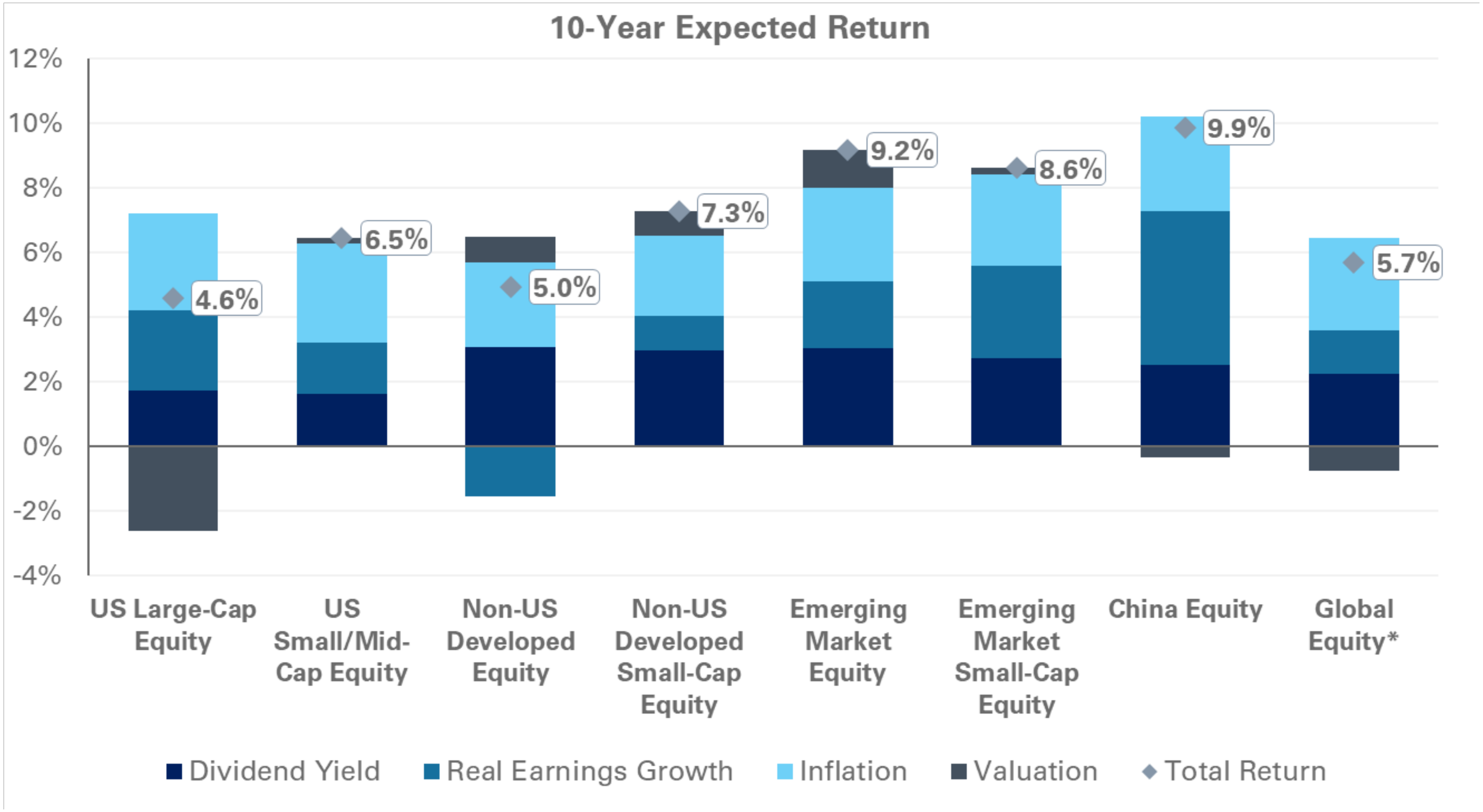
Annualized CPI* represents an annualized figure short-than 10 years
Sources: Department of Labor, FactSet

INFLATION MODEL IMPACT



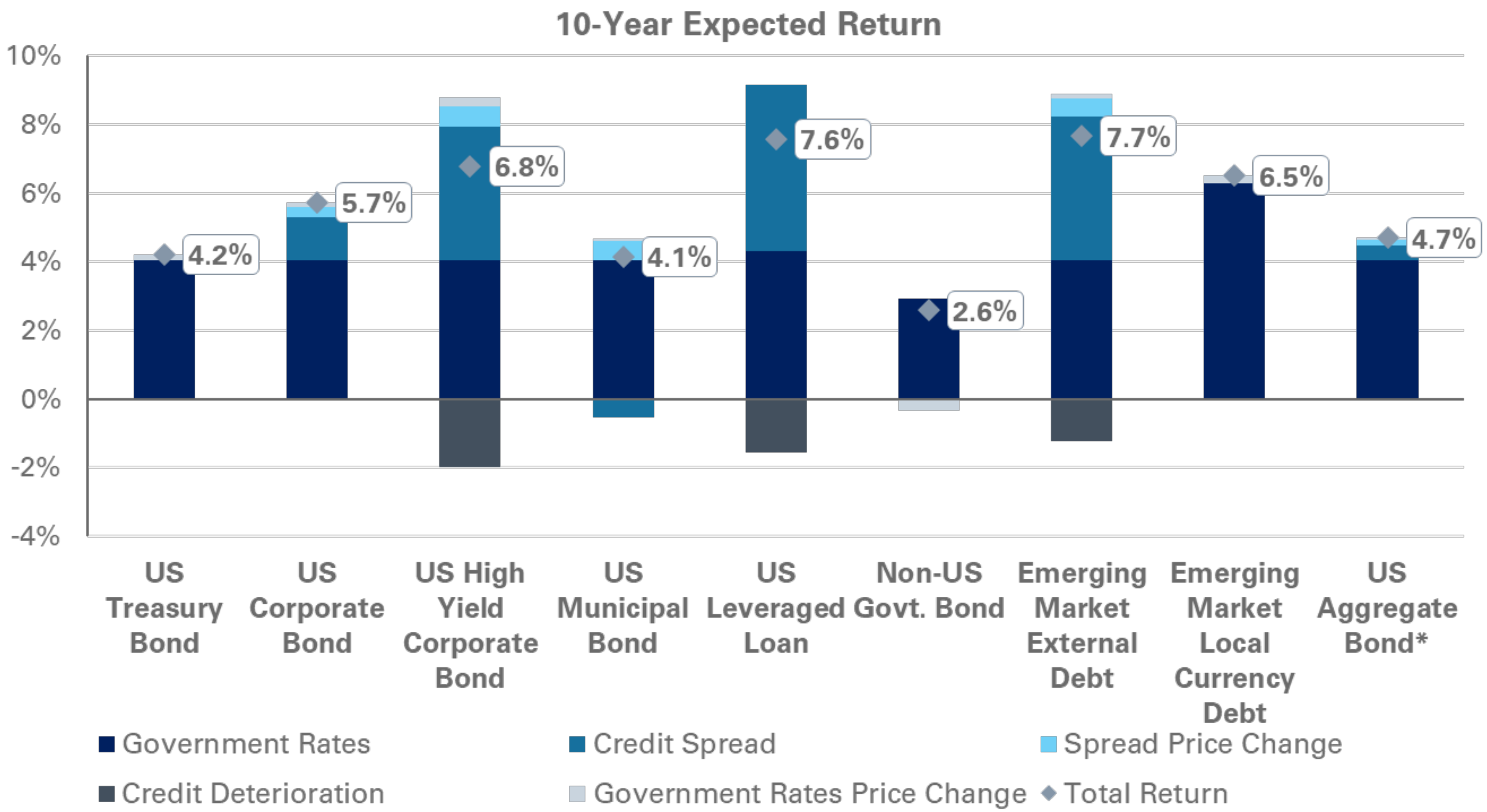
- **NEPC's new inflation methodology reflects higher inflation levels over the next 5 years relative to our previous approach**
  - NEPC's inflation assumption reflects a balance of the market's expectation for inflation and NEPC's inflation path

PUBLIC EQUITY
BUILDING BLOCKS



Source: NEPC
*Calculated as a blend of other classes

FIXED INCOME
BUILDING BLOCKS



Source: NEPC
*Calculated as a blend of other classes

10-YEAR RETURN FORECASTS

EQUITY

Geometric Expected Return			
Asset Class	**06/30/2023**	**06/30/2022**	**Delta**
U.S. Large-Cap Equity	**4.6%**	**5.8%**	**-1.2%**
U.S. Small/Mid-Cap Equity	**6.5%**	**7.2%**	**-0.7%**
Non-U.S. Developed Equity	**5.0%**	**6.4%**	**-1.4%**
Non-U.S. Developed Equity (USD Hedge)	**5.1%**	**6.5%**	**-1.4%**
Non-U.S. Developed Small-Cap Equity	**7.3%**	**7.4%**	**-0.1%**
Emerging Market Equity	**9.2%**	**9.6%**	**-0.4%**
Emerging Market Small-Cap Equity	8.6%	9.3%	-0.7%
Non-U.S. Private Equity	10.7%	11.0%	-0.3%
Global Equity*	**5.7%**	**6.8%**	**-1.1%**
Private Equity*	**9.1%**	**9.8%**	**-0.7%**

*Calculated as a blend of other asset classes

10-YEAR RETURN FORECASTS

FIXED INCOME

Geometric Expected Return			
Asset Class	**06/30/2023**	**06/30/2022**	**Delta**
Cash	**4.0%**	**2.9%**	**+1.1%**
US TIPS	**4.6%**	**3.0%**	**+1.6%**
US Treasury Bond	**4.2%**	**3.2%**	**+1.0%**
US Corporate Bond	**5.7%**	**5.2%**	**+0.5%**
US Mortgage-Backed Securities	**4.5%**	**3.4%**	**+1.1%**
US High Yield Corporate Bond	**6.8%**	**6.9%**	**-0.1%**
Private Debt*	8.6%	8.0%	+0.6%
US Short-Term TIPS (1-3 Year)	*4.6%*	*2.8%*	*+1.8%*
US Short-Term Treasury Bond (1-3 Year)	*4.3%*	*3.1%*	*+1.2%*
US Short-Term Corporate Bond (1-3 Year)	*5.4%*	*4.4%*	*+1.0%*
US Intermediate-Term TIPS (3-10 Year)	*4.6%*	*3.1%*	*+1.5%*
US Intermediate-Term Treasury Bond (3-10 Year)	*4.3%*	*3.2%*	*+1.1%*
US Intermediate-Term Corporate Bond (3-10 Year)	*6.0%*	*5.3%*	*+0.7%*
US Long-Term TIPS (10-30 Year)	*4.5%*	*3.5%*	*+1.0%*
US Long-Term Treasury Bond (10-30 Year)	*3.9%*	*3.2%*	*+0.7%*
US Long-Term Corporate Bond (10-30 Year)	*5.6%*	*5.4%*	*+0.2%*
US Aggregate Bond*	4.7%	3.8%	+0.9%

*Calculated as a blend of other asset classes

10-YEAR RETURN FORECASTS

REAL ASSETS

Geometric Expected Return			
Asset Class	**06/30/2023**	**06/30/2022**	**Delta**
Commodity Futures	4.8%	3.4%	+1.4%
Midstream Energy	6.0%	6.0%	-
REIT	6.4%	6.1%	+0.3%
Global Infrastructure Equity	5.9%	6.1%	-0.2%
Global Natural Resources Equity	6.8%	6.4%	+0.4%
Gold	5.3%	4.4%	+0.9%
Real Estate – Core (Risk 15.0)	**5.3%**	**4.4%**	**+0.9%**
Real Estate - Non-Core (Risk 18.5)	**6.7%**	**5.7%**	**+1.0%**
Private Debt - Real Estate	6.3%	5.3%	+1.0%
Private Real Assets – Infrastructure (Risk 12.4)	**6.3%**	**6.1%**	**+0.2%**

PRIVATE MARKETS COMPOSITES

PUBLIC MARKET BETA INPUTS FOR PRIVATE MARKETS

PRIVATE EQUITY

Buyout: 25% U.S. Large Cap, 75% U.S. Small/Mid Cap

Secondary: 25% U.S. Large Cap, 75% U.S. Small/Mid Cap

Growth: 50% U.S. Small/Mid Cap, 50% U.S. Microcap

Early-Stage Venture: 25% U.S. Small/Mid Cap, 75% U.S. Microcap

Non-U.S.: 70% International Small Cap, 30% Emerging Small Cap

Composite: 34% Buyout, 34% Growth, 15 % Non-U.S., 8.5% Secondary, 8.5% Early Venture

PRIVATE DEBT

Direct Lending: 100% Bank Loans

Distressed: 20% U.S. Small/Mid Cap, 60% U.S. High Yield, 20% Bank Loans

Credit Opportunities: 34% U.S. SMID Cap, 33% U.S. High Yield, 33% Bank Loans

Composite: 50% Direct Lending, 25% Credit Opportunities, 25% Distressed

PRIVATE REAL ASSETS

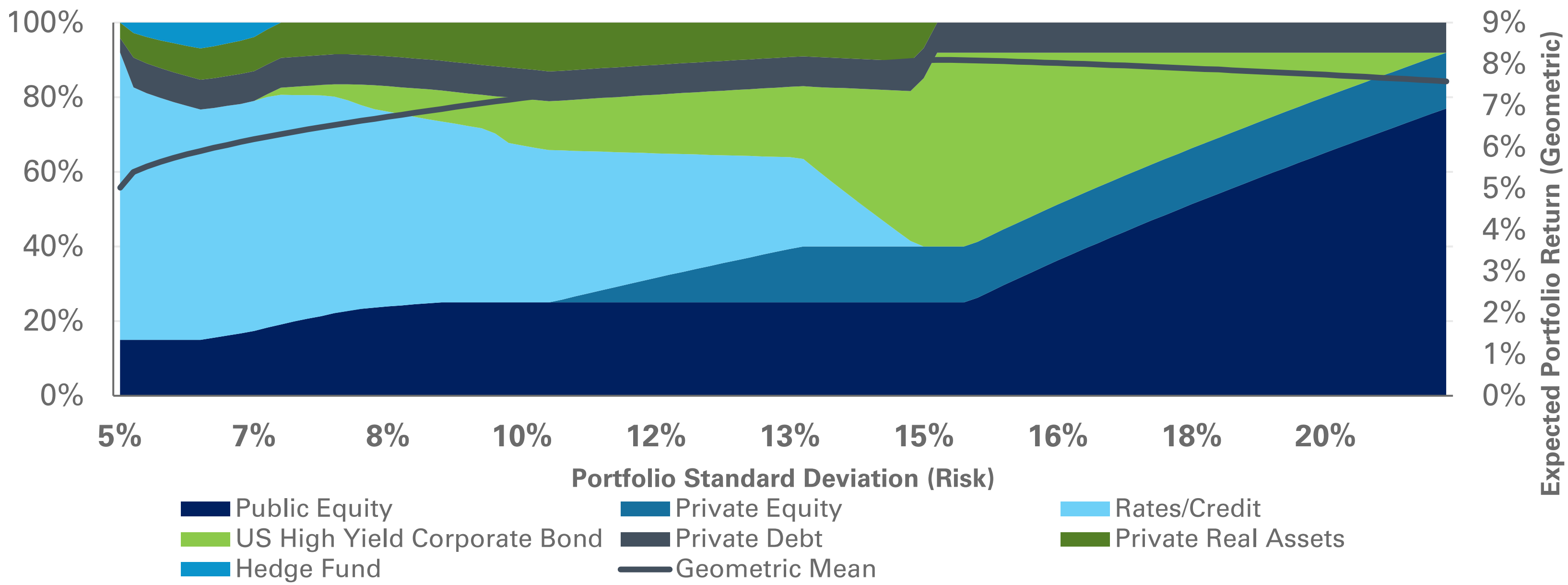
Energy: 30% Comm., 35% Midstream, 35% Public Resource Equity

Infra/Land: 30% Commodities, 70% Public Infrastructure

Private Real Estate Debt: 50% CMBS, 50% Real Estate - Core

APPENDIX – PRIOR PORTFOLIO OPTIMIZER RUNS

CONSTRAINT V2 EFFICIENT FRONTIER

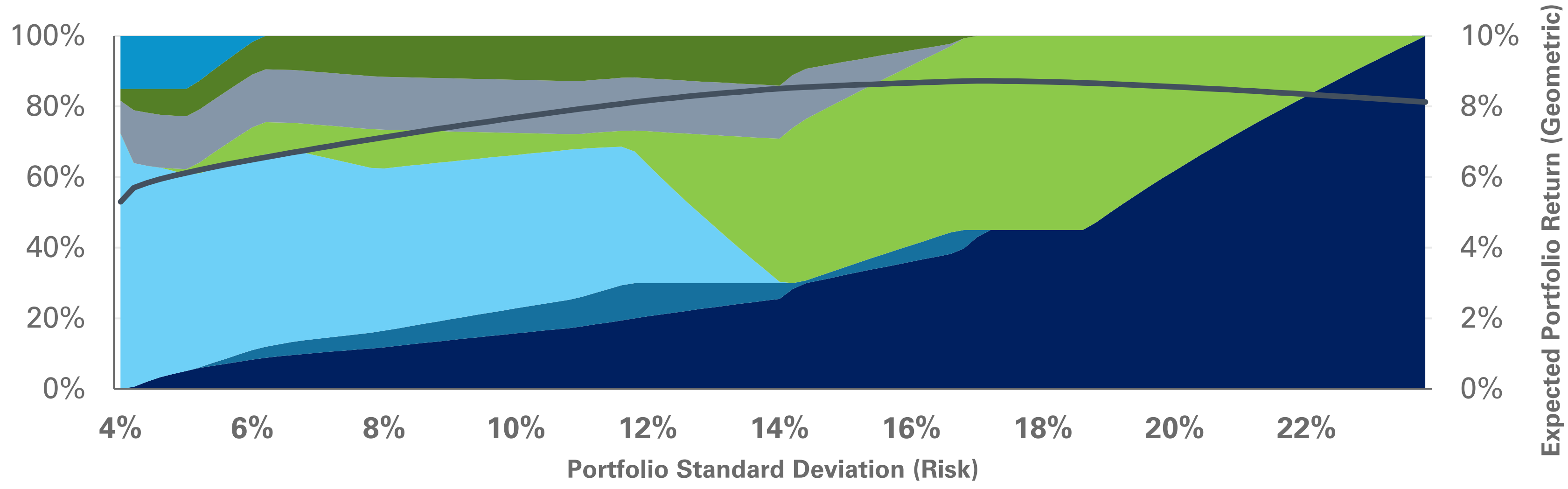


Asset Classes	6.5% Return	6.75% Return	7.0% Return	7.25% Return
US Large-Cap Equity	0.23%	0.00%	0.00%	0.00%
US Small/Mid-Cap Equity	14.77%	15.00%	15.00%	15.00%
Emerging Market Equity	6.33%	8.94%	10.00%	10.00%
US TIPS	10.00%	10.00%	10.00%	0.39%
US Corporate Bond	29.17%	24.56%	32.26%	40.42%
US High Yield Corporate Bond	2.82%	6.81%	8.76%	13.14%
US Short-Term Treasury Bond (1-3 Year)	20.00%	8.67%	0.00%	0.00%
Private Debt	8.00%	8.00%	8.00%	8.00%
US Intermediate-Term Treasury Bond (3-10 Year)	0.00%	8.97%	5.02%	0.00%
Private Real Assets - Infrastructure	8.68%	9.04%	10.95%	13.03%
Hedge Fund	0.00%	0.00%	0.00%	0.00%
Arithmetic Mean	6.72%	7.02%	7.37%	7.70%
Geometric Mean	**6.48%**	**6.73%**	**7.01%**	**7.26%**
Standard Deviation	7.53%	8.33%	9.29%	10.25%

As we add max and min constraints, risk will rise towards current Policy level

Based on NEPC's Capital Market Assumptions as of 12/31/2023

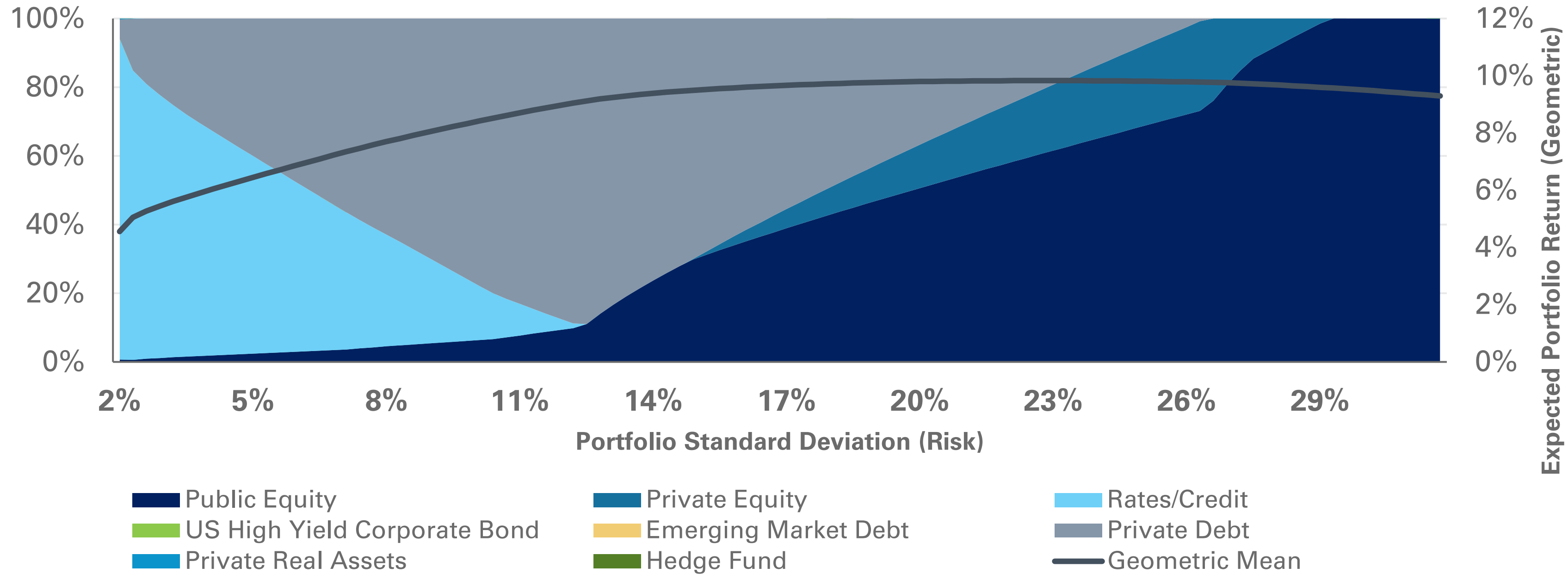
CONSTRAINED EFFICIENT FRONTIER (INCL. EMD)



Asset Classes	6.5% Return	6.75% Return	7.0% Return	7.25% Return
Emerging Market Equity	8.30%	9.96%	11.16%	12.63%
Private Equity	2.68%	3.82%	4.35%	5.18%
US TIPS	34.03%	27.72%	34.12%	29.96%
US Corporate Bond	0.34%	7.79%	9.22%	15.50%
US High Yield Corporate Bond	8.72%	8.29%	10.45%	9.97%
US Short-Term Treasury Bond (1-3 Year)	20.00%	17.52%	4.61%	0.00%
Private Debt	15.00%	15.00%	15.00%	15.00%
Private Real Assets - Infrastructure	9.23%	9.90%	11.09%	11.75%
Hedge Fund	1.69%	0.00%	0.00%	0.00%
Arithmetic Mean	6.66%	6.96%	7.26%	7.56%
Geometric Mean	6.50%	6.76%	7.01%	7.25%
Standard Deviation	6.18%	6.99%	7.80%	8.61%

Based on NEPC's Capital Market Assumptions as of 12/31/2023

UNCONSTRAINED EFFICIENT FRONTIER



Asset Classes	6.5% Return	6.75% Return	7.0% Return	7.25% Return
Emerging Market Equity	2.4%	2.8%	3.1%	3.4%
US TIPS	13.2%	16.6%	19.9%	23.1%
US Short-Term Treasury Bond (1-3 Year)	41.0%	29.0%	17.2%	5.4%
Private Debt	40.0%	44.8%	49.5%	54.1%
US Intermediate-Term Treasury Bond (3-10 Year)	3.3%	6.8%	10.4%	13.9%
Arithmetic Mean	6.56%	6.85%	7.14%	7.42%
Geometric Mean	6.45%	6.71%	6.97%	7.22%
Standard Deviation	5.14%	5.74%	6.34%	6.94%

Based on NEPC's Capital Market Assumptions as of 12/31/2023

INFORMATION DISCLAIMER

Past performance is no guarantee of future results.

The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

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Update on BAM University:

NON-INVESTMENT MATERIAL - QUARTERLY PERFORMANCE REPORTING SECTION (Public Reports):

State Street Quarterly Fund Performance Overview (Public):

STATE STREET

New York City
Fire Officers' Variable Supplements Fund
Performance Overview as of June 30, 2023

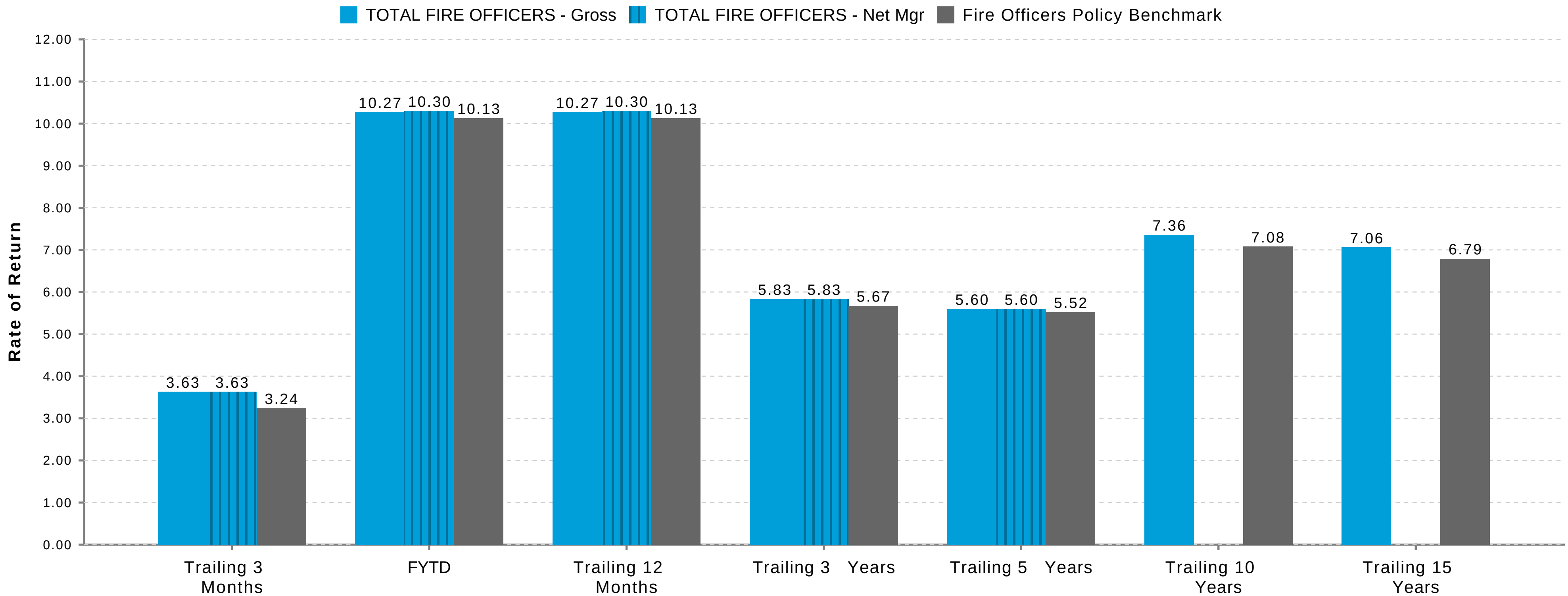
Total Fund Overview

New York City
Fire Officers' Variable Supplements Fund

Table of Contents:

Total Portfolio Returns: June 30, 2023

	Market Value (Millions)
TOTAL FIRE OFFICERS	$337.5



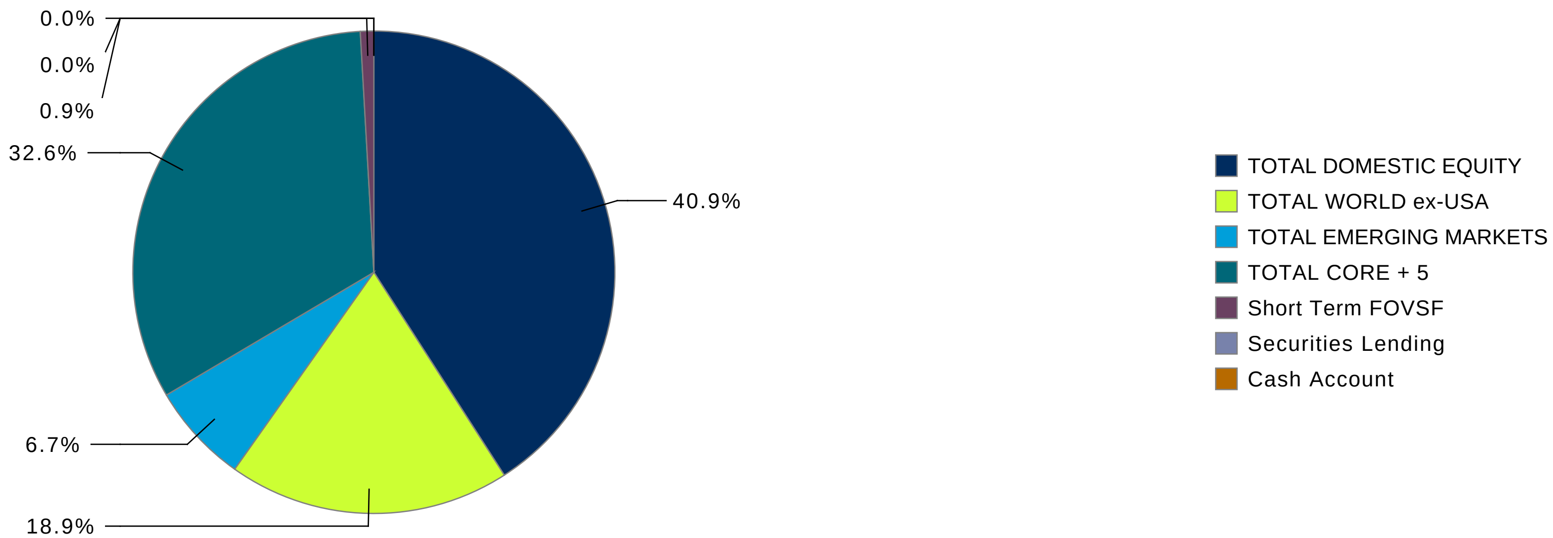
	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 7 Years	Benchmark 7 Years	Plan 10 Years	Benchmark 10 Years
Standard Deviation								
TOTAL FIRE OFFICERS	12.9	12.8	5.6	12.7	11.0	11.0	10.3	10.3

Portfolio Asset Allocation: June 30, 2023

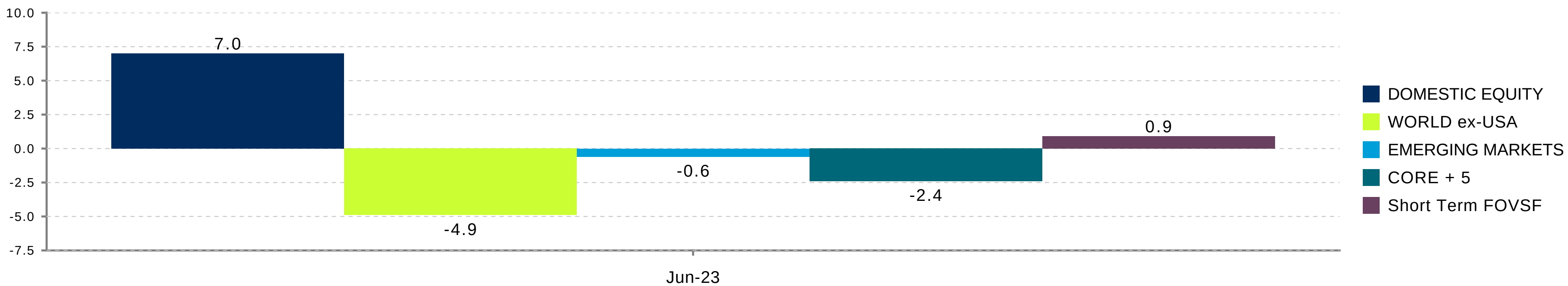
STATE STREET

	Market Value (Millions)
TOTAL FIRE OFFICERS	$337.5

Asset Allocation

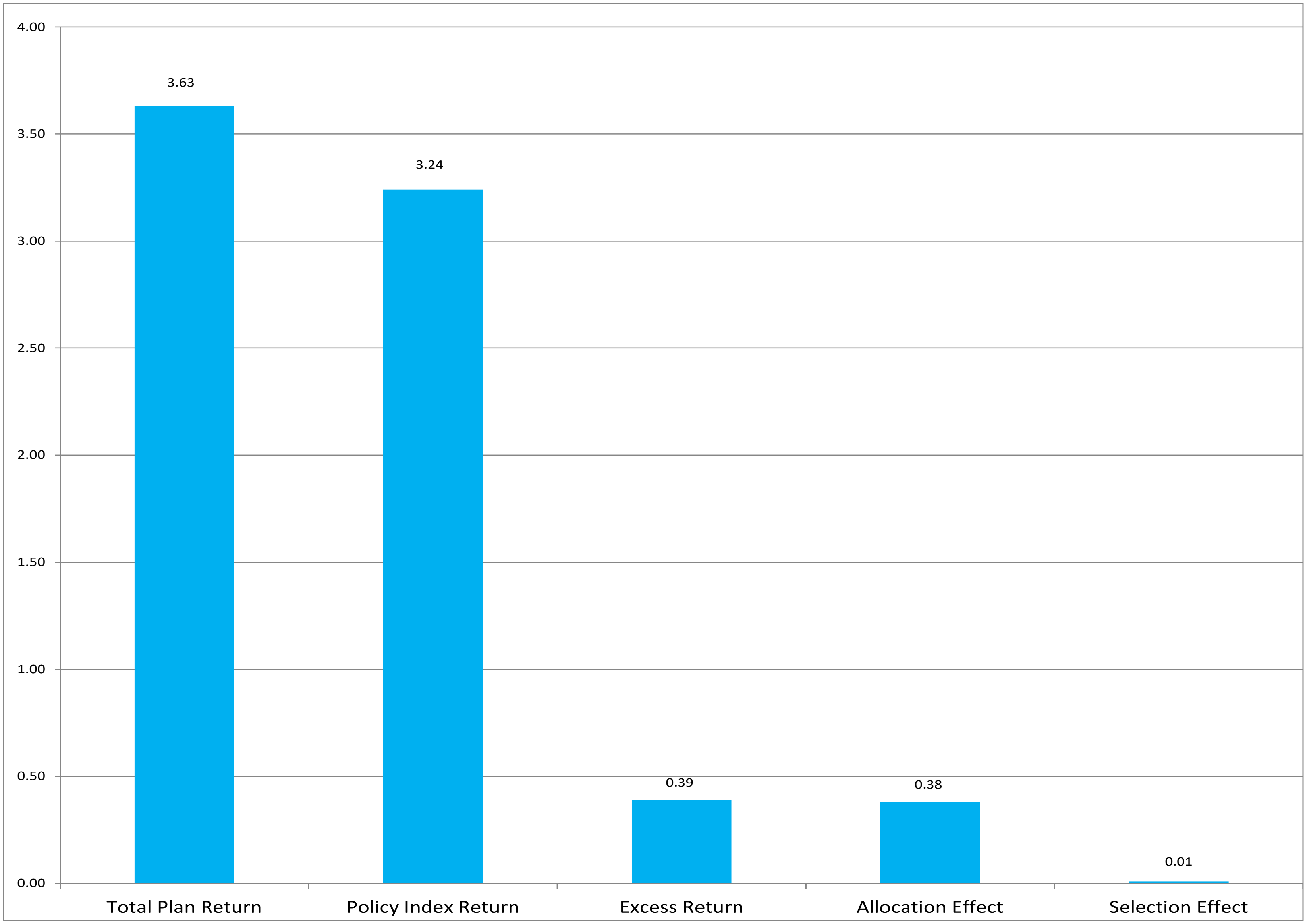


Relative Mix to Asset Weights

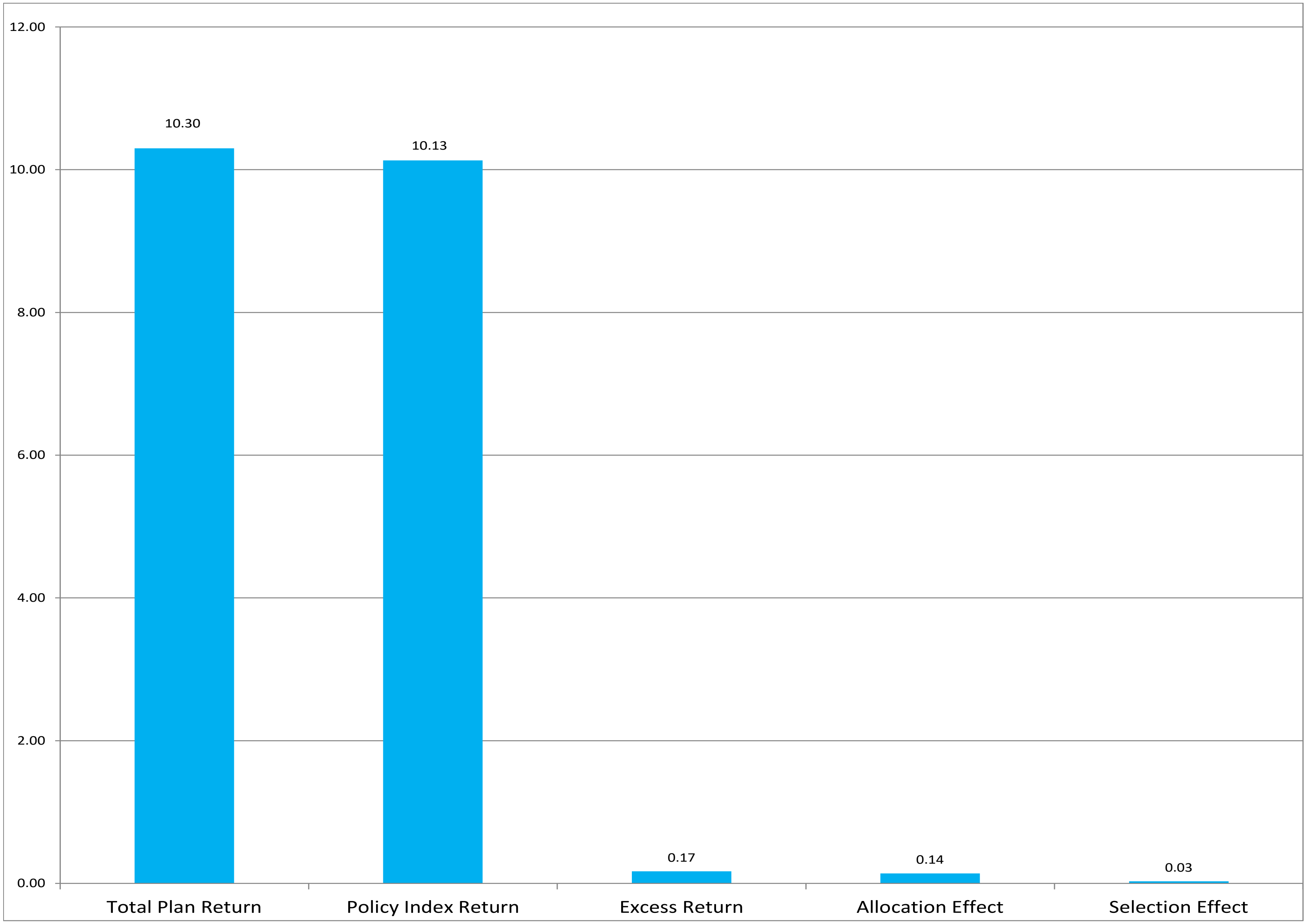


Performance Attribution: Total Plan - Quarter Ending: June 30, 2023

STATE STREET

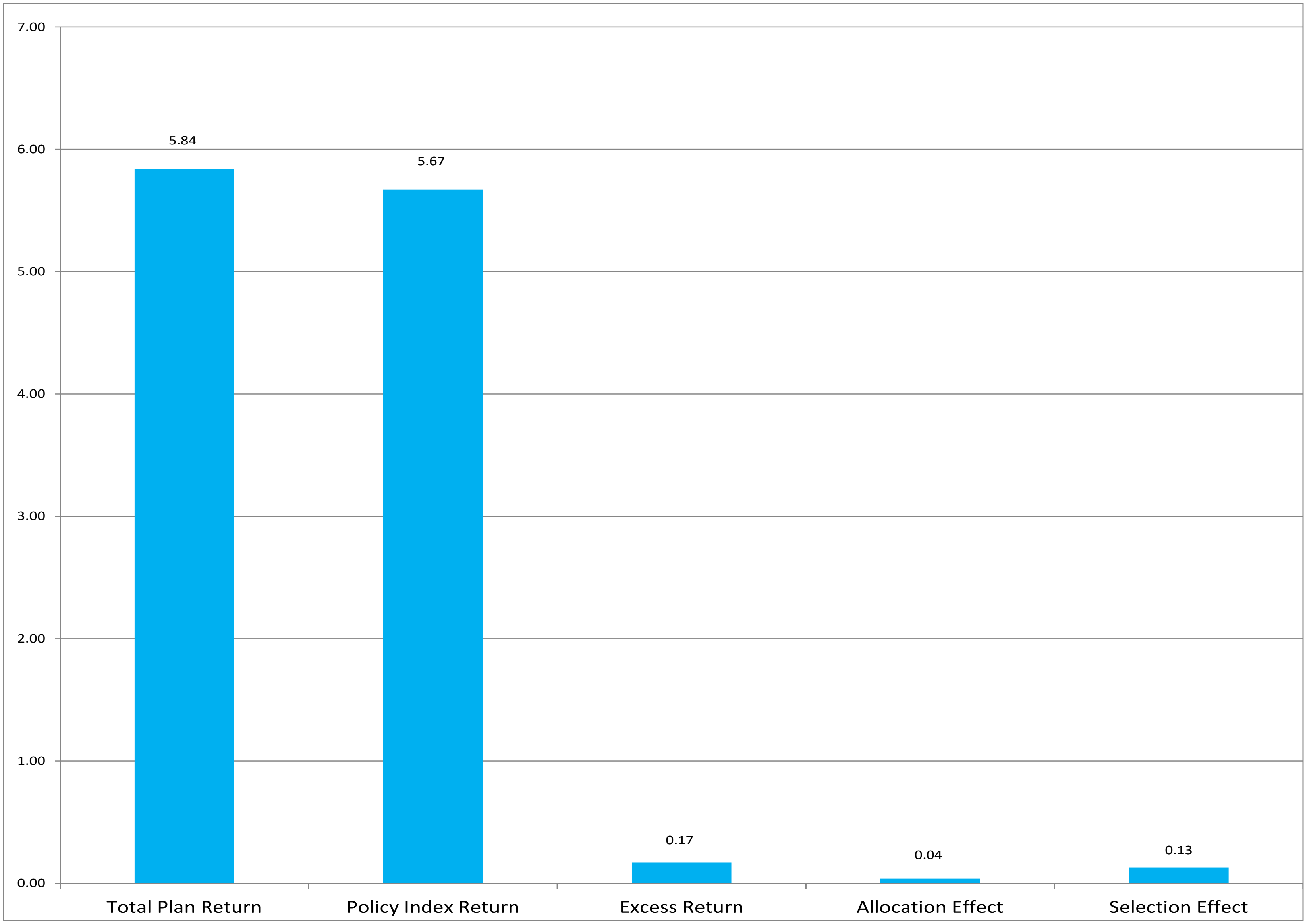


Performance Attribution: Total Plan - Fiscal Year to Date: June 30, 2023



Performance Attribution: Total Plan - 3 Years Ending: June 30, 2023

STATE STREET



Total Plan: June 30, 2023

STATE STREET

Allocation Effect - Asset Class Breakdown				
	Quarter	**FYTD**	**3 Years**	**Benchmark**
TOTAL FIRE OFFICERS	0.38	0.14	0.04	Fire Officers Policy Benchmark
TOTAL DOMESTIC EQUITY	0.30	0.42	0.21	RUSSELL 3000
TOTAL WORLD ex-USA EQUITY	0.03	-0.30	-0.14	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	0.01	-0.04	0.01	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.04	0.13	-0.04	Bloomberg Aggregate
TOTAL CASH	-0.01	-0.08	-0.01	

Selection Effect - Asset Class Breakdown				
	Quarter	**FYTD**	**3 Years**	**Benchmark**
TOTAL FIRE OFFICERS	0.01	0.03	0.13	Fire Officers Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.04	-0.14	-0.01	RUSSELL 3000
TOTAL WORLD ex-USA EQUITY	0.04	0.07	0.08	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	0.00	0.03	0.02	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.01	0.07	0.03	Bloomberg Aggregate
TOTAL CASH	0.00	0.00	0.00	

NYC FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND
SECURITIES LENDING INCOME
June 30, 2023

	U. S. FIXED INCOME	U. S. EQUITY	INTERNATIONAL EQUITY	TOTAL
2001	32,000	6,000	-	38,000
2002	20,000	6,200	-	26,200
2003	14,000	11,000	31,000	56,000
2004	24,000	24,000	24,000	72,000
2005	42,000	42,000	32,000	116,000
2006	44,000	98,000	32,000	174,000
2007	91,000	137,000	28,000	256,000
2008	240,000	195,000	37,000	472,000
2009	67,000	101,000	25,000	193,000
2010	32,000	101,000	20,000	153,000
2011	48,000	116,000	34,000	198,000
2012	37,000	129,000	25,000	191,000
2013	17,000	113,000	25,000	155,000
2014	7,900	11,000	131,000	149,900
2015	2,000	8,400	209,000	219,400
2016	7,000	131,000	170,000	308,000
2017	15,000	60,000	99,000	174,000
2018	6,012	33,752	110,683	150,447
2019	8,191	18,555	67,043	93,789
2020	15,965	17,049	51,526	84,540
2021	30,413	21,562	47,418	99,393
2022	44,317	25,442	36,394	106,152
2023 (6 Months)	17,289	20,592	17,493	55,373
Since Inception	862,086	1,426,552	1,252,557	3,541,194

New York City
Fire Officers' Variable Supplements Fund

Appendix A

Consolidated Performance Report

Consolidated Performance Report

Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
SYSTEM RETURN SUMMARY															
5 FIRE OFFICERS-TOTAL PORTFOLIO - GROSS	338	100.00	3.63	10.27	9.43	(14.23)	(16.35)	11.46	13.51	10.27	5.83	5.60	7.36	8.07	01/01/1988
FIRE OFFICERS- ESTIMATED INVESTMENT FEES			(0.00)	0.03	0.03	(0.01)	(0.00)	(0.01)	(0.01)	0.03	0.00	(0.00)			
EST MANAGEMENT FEES			(0.00)	0.03	0.03	(0.01)	(0.00)	(0.01)	(0.01)	0.03	0.00	(0.00)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FIRE OFFICERS-TOTAL PORTFOLIO - NET MGR			3.63	10.30	9.46	(14.23)	(16.35)	11.45	13.50	10.30	5.83	5.60			
FIRE OFFICERS POLICY BENCHMARK			3.24	10.13	9.00	(14.24)	(15.86)	10.52	13.79	10.13	5.67	5.52	7.08		
EXCESS RETURN			0.39	0.16	0.46	0.01	(0.50)	0.93	(0.29)	0.16	0.16	0.08	0.29		
EQUITY RETURN DETAIL															
17 FOVSF-TOTAL EQUITY - GROSS	224	66.46	5.91	16.25	13.16	(16.22)	(17.97)	18.27	16.54	16.25	11.21	7.94	9.83	6.97	08/01/2001
ESTIMATED INVESTMENT FEES			(0.00)	0.00	(0.00)	(0.00)	0.00	(0.01)	(0.01)	0.00	(0.00)	(0.01)			
EST MANAGEMENT FEES			(0.00)	0.00	(0.00)	(0.00)	0.00	(0.01)	(0.01)	0.00	(0.00)	(0.01)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
FOVSF-TOTAL EQUITY - NET MGR			5.91	16.25	13.15	(16.22)	(17.97)	18.26	16.53	16.25	11.21	7.93			
25 FOVSF-TOTAL DOMESTIC EQUITY - GROSS	138	40.86	8.28	18.56	15.74	(13.90)	(19.12)	25.67	20.87	18.56	13.83	11.32	12.38	10.48	01/01/1991
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	0.00	(0.00)	0.00	(0.00)	(0.00)	0.00	(0.00)			
FOVSF-TOTAL DOMESTIC EQUITY - NET MGR			8.28	18.56	15.74	(13.90)	(19.12)	25.67	20.87	18.56	13.83	11.32			
RUSSELL 3000/S&P500 04/30/09			8.39	18.95	16.17	(13.87)	(19.21)	25.66	20.89	18.95	13.89	11.39	12.34	10.44	
EXCESS RETURN			(0.10)	(0.39)	(0.43)	(0.03)	0.08	0.01	(0.02)	(0.39)	(0.06)	(0.07)	0.04	0.04	

Consolidated Performance Report

Through June 30, 2023

STATE STREET

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	EQUITY RETURN DETAIL															
37	FOVSF-TOTAL WORLD ex-USA - GROSS	64	18.92	2.87	16.69	10.73	(17.35)	(14.92)	12.69	8.90	16.69	9.30	4.48	6.68	5.85	07/01/1994
	ESTIMATED INVESTMENT FEES			(0.00)	0.01	(0.01)	(0.01)	0.01	(0.02)	(0.02)	0.01	(0.01)	(0.01)			
	FOVSF-TOTAL WORLD ex-USA - NET MGR			2.87	16.71	10.72	(17.37)	(14.91)	12.67	8.88	16.71	9.29	4.47			
	WORLD EX-USA CUSTOM BM			2.67	16.35	10.46	(17.73)	(15.26)	12.39	8.32	16.35	8.87	4.17	5.63	4.90	
	EXCESS RETURN			**0.19**	**0.36**	**0.26**	**0.36**	**0.35**	**0.28**	**0.55**	**0.36**	**0.42**	**0.30**	**1.04**	**0.95**	
47	FOVSF- TOTAL EMERGING MARKETS - GROSS	23	6.69	0.87	2.13	5.11	(24.78)	(19.57)	(2.08)	17.29	2.13	2.62	1.09	2.37	4.69	08/01/2005
	ESTIMATED INVESTMENT FEES			(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)			
	FOVSF-TOTAL EMERGING MARKETS - NET MGR			0.86	2.10	5.10	(24.79)	(19.57)	(2.10)	17.27	2.10	2.60	1.06			
	MSCI EMERGING MARKETS			0.90	1.75	4.89	(25.28)	(20.09)	(2.54)	18.31	1.75	2.32	0.93	2.95	5.28	
	EXCESS RETURN			**(0.03)**	**0.36**	**0.21**	**0.49**	**0.52**	**0.44**	**(1.04)**	**0.36**	**0.29**	**0.13**	**(0.58)**	**(0.60)**	

Consolidated Performance Report

Through June 30, 2023

STATE STREET

#		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	FIXED INCOME RETURN DETAIL															
59	**FOVSF-TOTAL FIXED INCOME - GROSS**	**113**	**33.53**	**(0.76)**	**(0.68)**	**2.32**	**(9.99)**	**(12.59)**	**(1.70)**	**7.64**	**(0.68)**	**(3.79)**	**0.86**	**1.97**	**5.03**	**08/01/1993**
	ESTIMATED INVESTMENT FEES			**(0.00)**	**0.07**	**0.08**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**	**0.07**	**0.01**	**0.00**			
	EST MANAGEMENT FEES			**(0.00)**	**0.07**	**0.08**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**	**0.07**	**0.01**	**0.00**			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FOVSF-TOTAL FIXED INCOME - NET MGR			**(0.77)**	**(0.62)**	**2.40**	**(10.00)**	**(12.60)**	**(1.71)**	**7.63**	**(0.62)**	**(3.78)**	**0.86**			
67	FOVSF-TOTAL STRUCTURED - GROSS	110	32.63	(0.82)	(0.81)	2.35	(10.28)	(13.01)	(1.76)	7.72	(0.81)	(3.95)	0.83	1.90	4.54	09/01/2000
	ESTIMATED INVESTMENT FEES			(0.00)	0.07	0.08	(0.01)	(0.01)	(0.01)	(0.02)	0.07	0.01	0.00			
	FOVSF-TOTAL STRUCTURED - NET MGR			(0.83)	(0.75)	2.43	(10.29)	(13.02)	(1.77)	7.70	(0.75)	(3.94)	0.83			
	BLOOMBERG U.S. AGGREGATE			(0.84)	(0.94)	2.09	(10.29)	(13.01)	(1.54)	7.51	(0.94)	(3.96)	0.77	1.52	3.83	
	EXCESS RETURN			0.02	0.19	0.33	0.00	(0.01)	(0.23)	0.19	0.19	0.03	0.06	**0.38**	**0.71**	
	CASH SUMMARY															
79	Short Term FOVSF - GROSS	3	0.90	1.25	3.90	2.37	0.28	1.73	0.20	0.02	3.90	1.34	1.49			01/01/1988
	ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Short Term FOVSF - NET MGR			1.25	3.90	2.37	0.28	1.73	0.20	0.02	3.90	1.34	1.49			
83	Cash Account	0	0.00													
85	Securities Lending	0	0.00													

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

STATE STREET

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
EQUITY SUMMARY										
US EQUITY										
BlackRock US SCG R2000	$5	1.40	7.01	18.46	13.50	(26.38)	3.35	34.42	28.39	(9.14)
RUSSELL 2000 GROWTH DAILY			7.05	18.53	13.55	(26.36)	2.83	34.63	28.48	(9.31)
Excess			(0.04)	(0.07)	(0.05)	(0.02)	0.51	(0.21)	(0.09)	0.17
BlackRock US SCV R2000	$6	1.68	3.14	6.06	2.58	(14.51)	28.48	4.87	22.60	(12.79)
RUSSELL 2000 VALUE DAILY			3.18	6.01	2.50	(14.48)	28.27	4.63	22.39	(12.86)
Excess			(0.05)	0.06	0.08	(0.03)	0.21	0.24	0.20	0.08
BlackRock US LMC R1000 Core	$128	37.78	8.57	19.17	16.48	(19.09)	26.47	20.89	31.37	
RUSSELL 1000 (DAILY)			8.58	19.36	16.68	(19.13)	26.45	20.96	31.43	
Excess			(0.01)	(0.20)	(0.20)	0.04	0.02	(0.08)	(0.06)	
NON - US EQUITY										
SSGA WorldxUS LMC NYC Custom IDX	$55	16.31	3.24	17.86	11.59	(13.84)	12.90	8.09	22.75	(13.64)
NYC Custom World ex US Index [1]			3.03	17.41	11.29	(14.29)	12.62	7.59	22.49	(14.09)
Excess			0.21	0.45	0.30	0.45	0.27	0.50	0.26	0.45
SSGA WORLD EX USA SMALL CAP [2]	$9	2.61	0.58	10.26	5.63	(20.23)	11.27	13.16	25.67	(17.97)
World ex USA SC PASSIVE CUSTOM BM [3]			0.49	10.05	5.50	(20.58)	11.14	12.78	25.41	(18.07)
Excess			0.10	0.21	0.13	0.36	0.14	0.37	0.26	0.10
EMERGING MARKETS										
BlackRock MSCI EM Core	$23	6.69	0.86	2.10	5.10	(19.57)	(2.10)	17.27	18.76	(14.44)
MSCI EMERGING MARKETS			0.90	1.75	4.89	(20.09)	(2.54)	18.31	18.42	(14.57)
Excess			(0.03)	0.36	0.21	0.52	0.44	(1.04)	0.34	0.13

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

STATE STREET

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
FIXED INCOME SUMMARY										
STRUCTURED FIXED INCOME										
SSGA-Core US Agg	$110	32.63	(0.83)	(0.75)	2.43	(13.02)	(1.77)	7.70	8.75	(0.24)
Bloomberg U.S. Aggregate			(0.84)	(0.94)	2.09	(13.01)	(1.54)	7.51	8.72	0.01
Excess			0.02	0.19	0.33	(0.01)	(0.23)	0.19	0.03	(0.25)
CASH										
Short Term FOVSF	$3	0.90	1.25	3.90	2.37	1.73	0.20	0.02	2.09	1.62
ICE BofA US 3-Month Treasury Bill			1.17	3.59	2.25	1.46	0.05	0.67	2.28	1.87
Excess			0.09	0.30	0.11	0.27	0.15	(0.65)	(0.19)	(0.25)
Cash Account	$0	0.00								
Securities Lending	$0	0.00								

STATE STREET

New York City
Fire Officers' Variable Supplements Fund

Appendix C

Footnotes

Glossary of Terms

Through June 30, 2023

General Notes

- Returns are Net of Manager Fees for periods after January 2014 and Gross of investment advisory fees for other periods unless otherwise indicated.
- Returns over 1 year are annualized.

Page Specific

Page 4 - Portfolio Asset Allocation

- Rebalancing Ranges: the minimum and maximum weights that actual Asset Allocation may reach before rebalancing between Asset Classes is necessary.

Pages 5 - 7 - Performance Attribution: Total Plan

- Plan Return at Policy Weights: the return of the Total Plan assuming actual Asset Class results were maintained at target (Adjusted Policy) weights. *Figure = (Return of Asset Class 1* Target Weight) plus (Return Of Asset Class 2* Target Weight) plus (……)*

- **Allocation Effect =** Total Plan Return minus Plan Return At Adjusted Policy Weights. Allocation is the Contribution to Performance resulting from an overweight or underweight to an asset class. E.g. an underweight to an Asset Class that under-performs results in a positive Allocation Effect and vice versa.

- **Selection Effect =** Equal to the Custom Benchmark (Adjusted Policy Index) Return minus Plan Return at Adjusted Policy Weights. This illustrates how the Managers have added or removed value based on their Security Selection decisions, e.*g., If the manager's Actual Returns are higher than the Implied Return there will be a positive Selection Effect.*

- **Policy Index = Custom Benchmark**
  The "policy index" is a custom benchmark representing the weighted average return of the weighted benchmark indexes for each major investment program. Weights may reflect an adjustment of actual policy for outstanding commitments for new or revised programs, such as for private market programs, which are invested gradually, or for any new or updated program requiring the completion of RFPs and contracts. The policy index/custom benchmark is calculated monthly based on adjusted policy weights at the beginning of each month.

Glossary of Terms

Through June 30, 2023

The indexes and most recent policy weights are as follows:

*U.S. Equity: Russell 3000 * 33.90%*

*International Developed (EAFE) Markets: MSCI World ex USA IMI Net * 23.80%*

*International Emerging Markets: MSCI Emerging Markets * 7.30%*

*REITs: Dow Jones Select Real Estate Securities * 0.00%*

*Domestic Fixed Income: Bloomberg Aggregate * 35.00%*

*TIPS: Bloomberg Global Inflation Linked US TIPS * 0.00%*

*High Yield: FTSE BB&B * 0.00%*

Page 8 – Allocation and Selection Effects - Asset Class Breakdown

- This chart aims to break down the Allocation and Selection Effects shown on the Performance Attribution pages. The aim of the Page is to show the asset classes where Managers are either out performing or under performing their benchmark and to show the basis point effect that this is having on Plan performance.

Footnotes

Through June 30, 2023

[1] NYC Custom World ex US Index: Beginning 2.2017 benchmark changed from MSCI EAFE to MSCI World ex USA Net Index.

[2] Name changed from SSGA EAFE SC IDX 12.2017

[3] World ex USA SC PASSIVE CUSTOM BM: Beginning 12.2017 benchmark changed from MSCI EAFE Small Cap Net to MSCI World ex US Small Cap (Net).

New York City
Firefighters' Variable Supplements Fund
Performance Overview as of June 30, 2023

Total Fund Overview

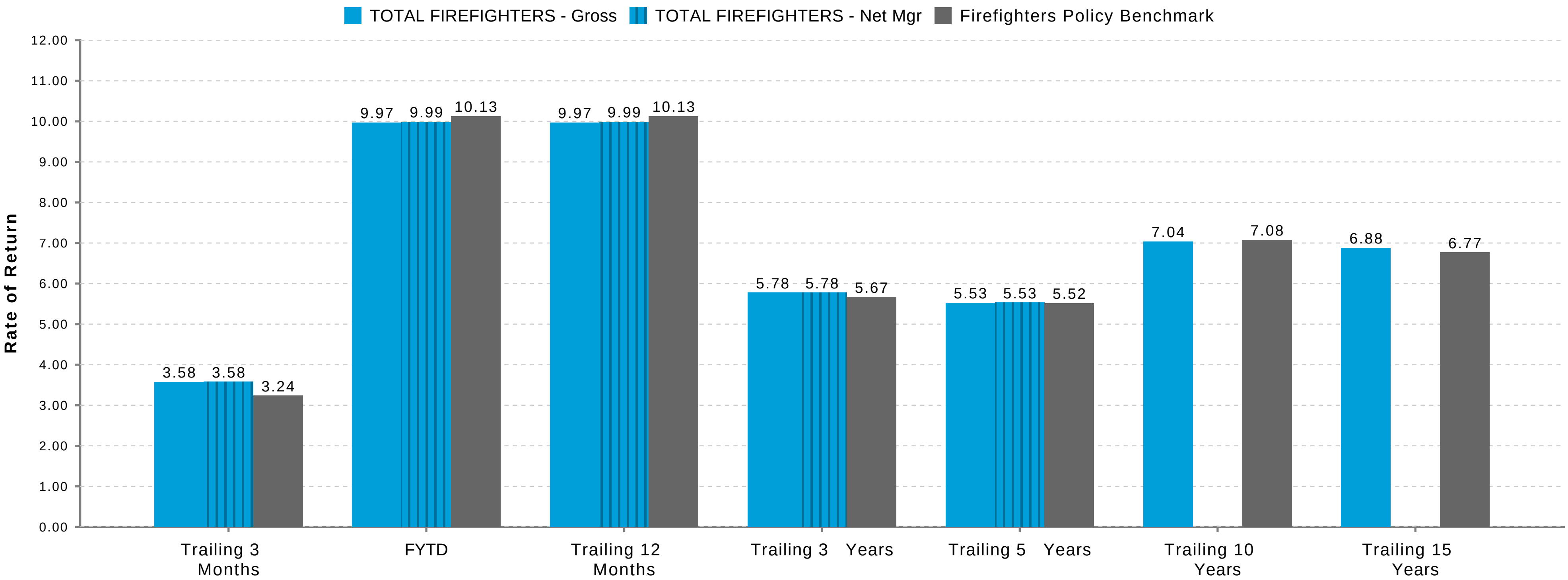
STATE STREET

New York City
Firefighters' Variable Supplements Fund

Table of Contents:

Total Portfolio Returns: June 30, 2023

	Market Value (Millions)
TOTAL FIREFIGHTERS	$444.1



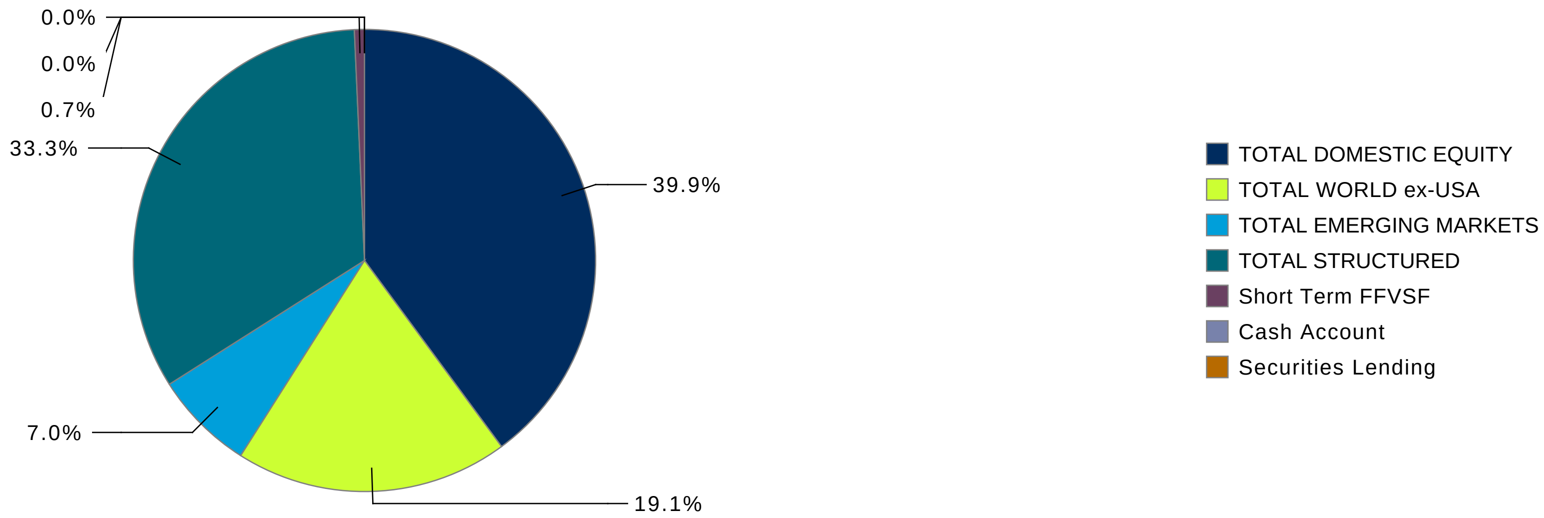
	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 7 Years	Benchmark 7 Years	Plan 10 Years	Benchmark 10 Years
Standard Deviation								
TOTAL FIREFIGHTERS	12.8	12.8	5.5	12.7	10.9	11.0	10.1	10.3

Portfolio Asset Allocation: June 30, 2023

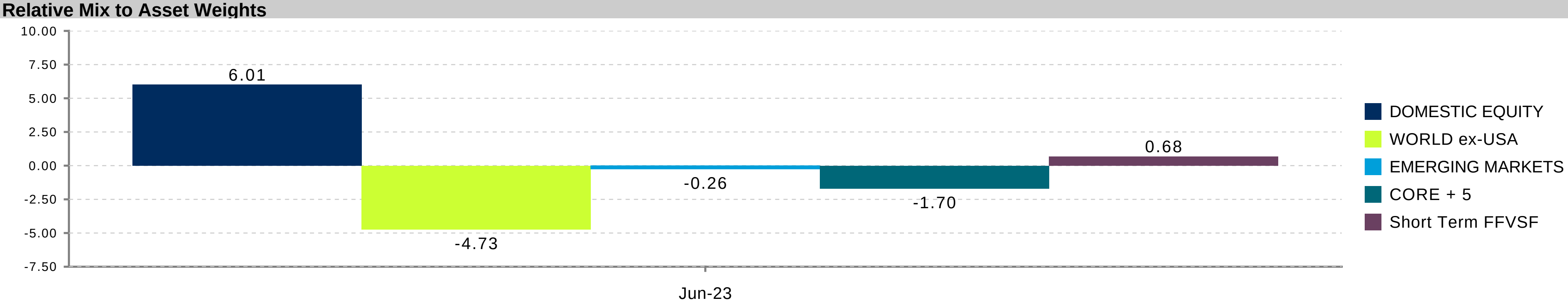
STATE STREET

	Market Value (Millions)
TOTAL FIREFIGHTERS	$444.1

Asset Allocation

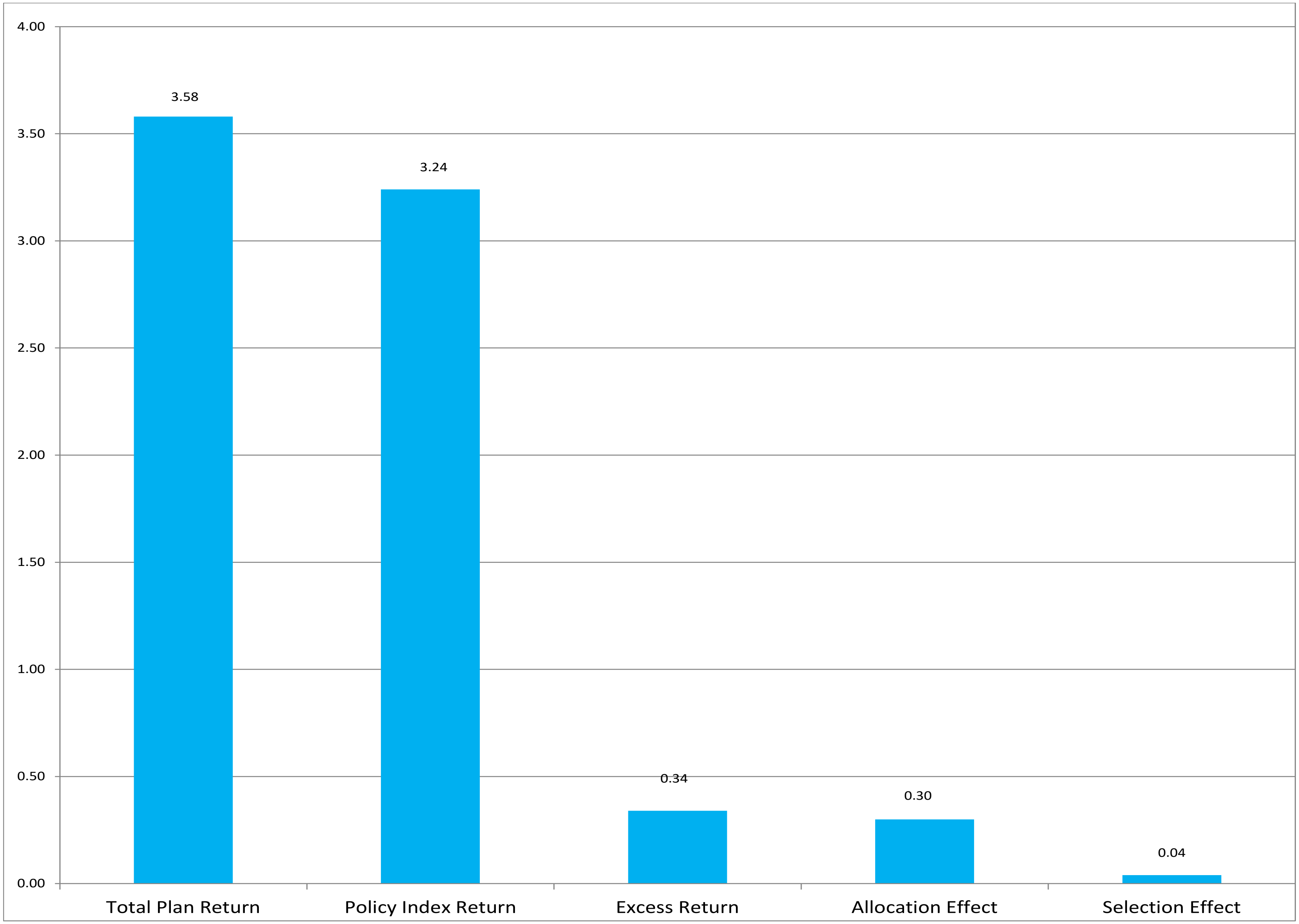


Relative Mix to Asset Weights

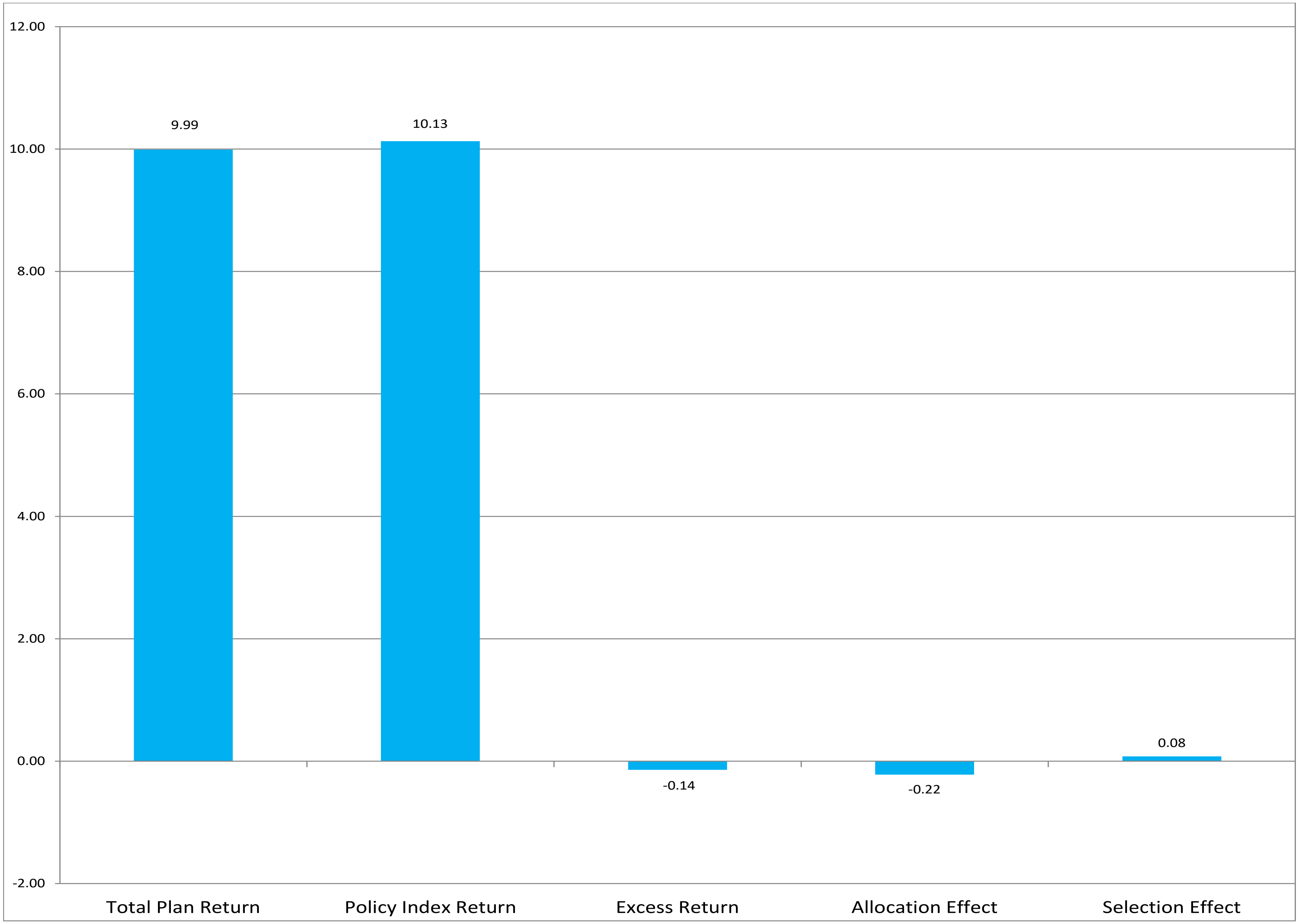


Performance Attribution: Total Plan - Quarter Ending: June 30, 2023

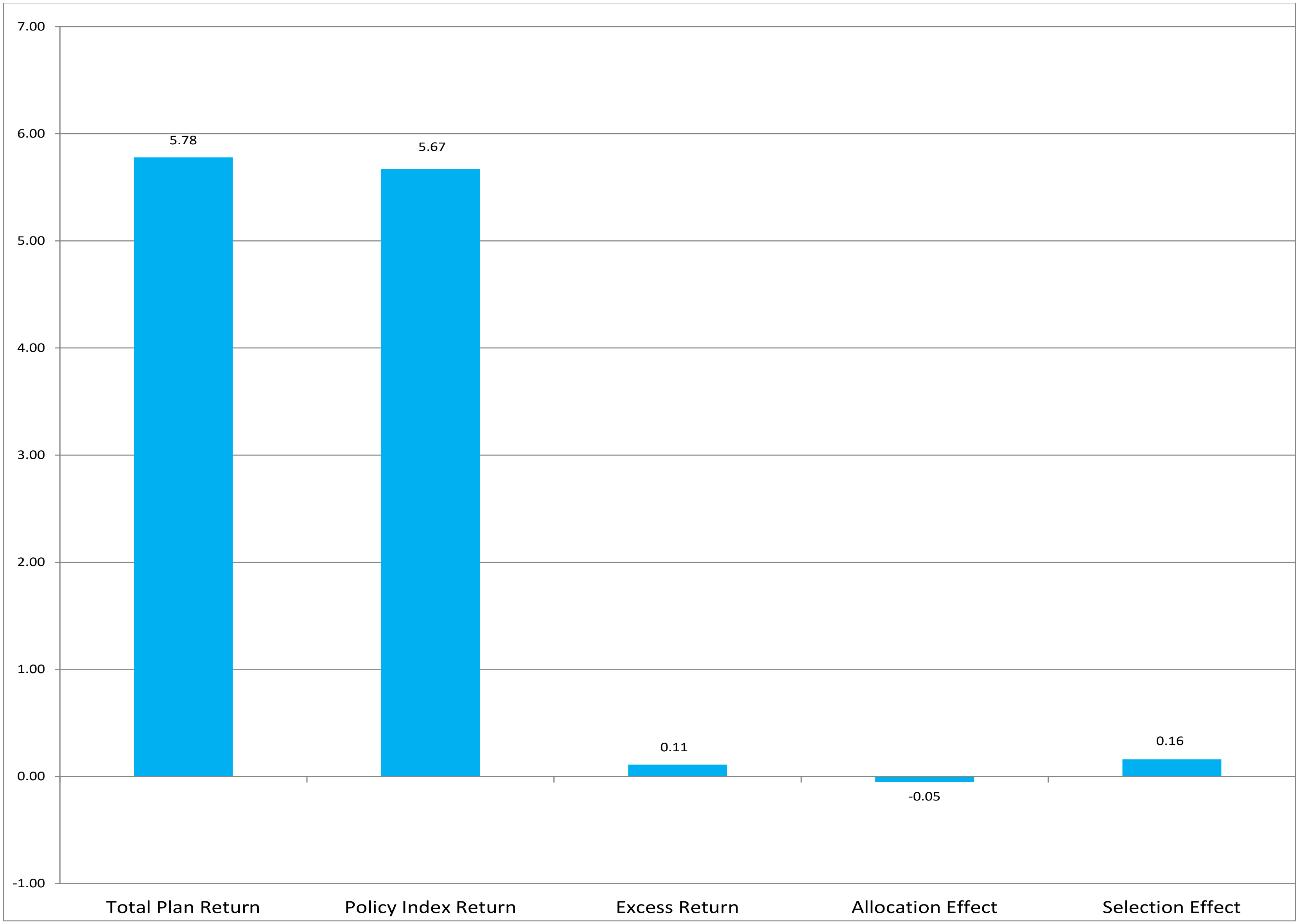
STATE STREET



Performance Attribution: Total Plan - Fiscal Year to Date: June 30, 2023



Performance Attribution: Total Plan - 3 Years Ending: June 30, 2023



Total Plan: June 30, 2023

Allocation Effect - Asset Class Breakdown				
	Quarter	**FYTD**	**3 Years**	**Benchmark**
TOTAL FIREFIGHTERS	0.30	-0.22	-0.05	Firefighters Policy Benchmark
TOTAL DOMESTIC EQUITY	0.25	0.33	0.26	RUSSELL 3000
TOTAL WORLD ex-USA EQUITY	0.04	-0.37	-0.16	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	0.00	-0.06	-0.04	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.02	-0.08	-0.08	Bloomberg Aggregate
TOTAL CASH	-0.01	-0.03	-0.04	

Selection Effect - Asset Class Breakdown				
	Quarter	**FYTD**	**3 Years**	**Benchmark**
TOTAL FIREFIGHTERS	0.04	0.08	0.16	Firefighters Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.01	-0.10	0.01	RUSSELL 3000
TOTAL WORLD ex-USA EQUITY	0.04	0.09	0.09	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	0.00	0.02	0.03	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.01	0.06	0.02	Bloomberg Aggregate
TOTAL CASH	0.00	0.00	0.00	

STATE STREET

NYC FIRE FIGHTERS' VARIABLE SUPPLEMENTS FUND
SECURITIES LENDING INCOME
June 30, 2023

	U. S. FIXED INCOME	U. S. EQUITY	INTERNATIONAL EQUITY	TOTAL
2001	73,000	57,000	-	130,000
2002	34,000	36,000	-	70,000
2003	22,000	48,000	59,000	129,000
2004	45,000	93,000	45,000	183,000
2005	76,000	147,000	61,000	284,000
2006	79,000	192,000	63,000	334,000
2007	164,000	293,000	51,000	508,000
2008	451,000	492,000	65,000	1,008,000
2009	123,000	231,000	45,000	399,000
2010	49,000	204,000	31,000	284,000
2011	62,000	211,000	51,000	324,000
2012	60,000	201,000	36,000	297,000
2013	25,000	174,000	37,000	236,000
2014	6,800	18,000	133,000	157,800
2015	4,300	9,300	272,000	285,600
2016	11,000	159,000	205,000	375,000
2017	19,000	82,000	136,000	237,000
2018	8,674	42,245	142,702	193,621
2019	11,565	26,816	94,132	132,513
2020	21,844	23,735	71,690	117,269
2021	40,227	29,157	62,369	131,753
2022	59,545	32,364	48,849	140,757
2023 (6 Months)	22,263	26,488	22,558	71,309
Since Inception	1,468,218	2,828,105	1,732,299	6,028,622

STATE STREET

New York City
Firefighters' Variable Supplements Fund

Appendix A

Consolidated Performance Report

Consolidated Performance Report

STATE STREET

Through June 30, 2023

#		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	SYSTEM RETURN SUMMARY															
5	FIREFIGHTERS-TOTAL PORTFOLIO - GROSS	444	100.00	3.58	9.97	9.37	(13.96)	(16.31)	11.22	13.51	9.97	5.78	5.53	7.04	8.17	01/01/1988
	FIREFIGHTERS- ESTIMATED INVESTMENT FEES			(0.00)	0.03	0.03	(0.01)	(0.00)	(0.01)	(0.01)	0.03	0.00	(0.00)			
	EST MANAGEMENT FEES			(0.00)	0.03	0.03	(0.01)	(0.00)	(0.01)	(0.01)	0.03	0.00	(0.00)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FIREFIGHTERS-TOTAL PORTFOLIO - NET MGR			3.58	9.99	9.40	(13.96)	(16.31)	11.21	13.50	9.99	5.78	5.53			
	FIREFIGHTERS POLICY BENCHMARK			3.24	10.13	9.00	(14.24)	(15.86)	10.52	13.79	10.13	5.67	5.52	7.08		
	EXCESS RETURN			0.33	(0.14)	0.40	0.28	(0.45)	0.69	(0.29)	(0.14)	0.11	0.01	(0.04)		
	EQUITY RETURN DETAIL															
17	FFVSF-TOTAL EQUITY - GROSS	293	66.02	5.89	16.18	13.26	(16.10)	(18.06)	18.35	16.46	16.18	11.22	7.95	9.46	7.21	08/01/2001
	ESTIMATED INVESTMENT FEES			(0.00)	0.00	(0.00)	(0.00)	0.00	(0.01)	(0.01)	0.00	(0.00)	(0.01)			
	EST MANAGEMENT FEES			(0.00)	0.00	(0.00)	(0.00)	0.00	(0.01)	(0.01)	0.00	(0.00)	(0.01)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FFVSF-TOTAL EQUITY - NET MGR			5.89	16.18	13.26	(16.10)	(18.06)	18.34	16.45	16.18	11.21	7.95			
25	FFVSF-TOTAL DOMESTIC EQUITY - GROSS	177	39.91	8.36	18.68	16.12	(13.69)	(19.32)	25.87	20.80	18.68	13.90	11.32	12.33	10.39	06/01/1988
	ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	0.00	0.00	0.00	(0.00)	(0.00)	0.00	(0.00)			
	FFVSF-TOTAL DOMESTIC EQUITY - NET MGR			8.36	18.68	16.12	(13.69)	(19.32)	25.87	20.80	18.68	13.90	11.32			
	RUSSELL 3000 (DAILY)			8.39	18.95	16.17	(13.87)	(19.21)	25.66	20.89	18.95	13.89	11.39	12.34	10.67	
	EXCESS RETURN			(0.03)	(0.28)	(0.05)	0.18	(0.11)	0.21	(0.09)	(0.28)	0.02	(0.07)	(0.01)	(0.28)	

Consolidated Performance Report

Through June 30, 2023

STATE STREET

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	EQUITY RETURN DETAIL															
37	FFVSF-TOTAL WORLD ex-USA - GROSS	85	19.07	2.87	16.85	10.73	(17.34)	(14.79)	12.67	8.86	16.85	9.33	4.61	5.02	5.99	07/01/1994
	ESTIMATED INVESTMENT FEES			(0.00)	0.01	(0.01)	(0.01)	0.01	(0.02)	(0.02)	0.01	(0.01)	(0.01)			
	FFVSF-TOTAL WORLD ex-USA - NET MGR			2.87	16.86	10.72	(17.35)	(14.78)	12.66	8.85	16.86	9.33	4.60			
	WORLD EX-USA CUSTOM BM			2.67	16.35	10.46	(17.73)	(15.26)	12.39	8.32	16.35	8.87	4.17	5.63	4.90	
	EXCESS RETURN			**0.19**	**0.51**	**0.26**	**0.38**	**0.48**	**0.26**	**0.52**	**0.51**	**0.46**	**0.43**	**(0.62)**	**1.09**	
47	FFVSF-TOTAL EMERGING MARKETS - GROSS	31	7.04	0.87	2.07	5.11	(24.71)	(19.61)	(1.98)	17.29	2.07	2.64	1.10	2.38	4.65	08/01/2005
	ESTIMATED INVESTMENT FEES			(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)			
	FFVSF-TOTAL EMERGING MARKETS - NET MGR			0.86	2.05	5.10	(24.72)	(19.62)	(2.01)	17.27	2.05	2.62	1.08			
	MSCI EMERGING MARKETS			0.90	1.75	4.89	(25.28)	(20.09)	(2.54)	18.31	1.75	2.32	0.93	2.95	5.28	
	EXCESS RETURN			**(0.03)**	**0.30**	**0.21**	**0.57**	**0.47**	**0.54**	**(1.04)**	**0.30**	**0.30**	**0.15**	**(0.57)**	**(0.63)**	

Consolidated Performance Report

STATE STREET

Through June 30, 2023

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	FIXED INCOME RETURN DETAIL															
59	**FFVSF-TOTAL FIXED INCOME - GROSS**	**151**	**33.97**	**(0.78)**	**(0.76)**	**2.35**	**(10.13)**	**(12.83)**	**(1.70)**	**7.57**	**(0.76)**	**(3.87)**	**0.82**	**1.95**	**5.71**	**05/01/1988**
	ESTIMATED INVESTMENT FEES			**(0.00)**	**0.07**	**0.08**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**	**0.07**	**0.01**	**0.00**			
	EST MANAGEMENT FEES			**(0.00)**	**0.07**	**0.08**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.02)**	**0.07**	**0.01**	**0.00**			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FFVSF-TOTAL FIXED INCOME - NET MGR			**(0.78)**	**(0.69)**	**2.43**	**(10.14)**	**(12.84)**	**(1.71)**	**7.56**	**(0.69)**	**(3.86)**	**0.82**			
67	FFVSF-TOTAL STRUCTURED - GROSS	148	33.30	(0.82)	(0.84)	2.35	(10.26)	(13.01)	(1.76)	7.72	(0.84)	(3.95)	0.82	1.86	4.33	09/01/2000
	ESTIMATED INVESTMENT FEES			(0.00)	0.07	0.08	(0.01)	(0.01)	(0.01)	(0.02)	0.07	0.01	0.00			
	FFVSF-TOTAL STRUCTURED - NET MGR			(0.83)	(0.77)	2.43	(10.27)	(13.02)	(1.77)	7.70	(0.77)	(3.94)	0.82			
	BLOOMBERG U.S. AGGREGATE			(0.84)	(0.94)	2.09	(10.29)	(13.01)	(1.54)	7.51	(0.94)	(3.96)	0.77	1.52	3.83	
	EXCESS RETURN			0.02	0.16	0.33	0.02	(0.01)	(0.23)	0.19	0.16	0.03	0.06	**0.34**	**0.50**	
	CASH SUMMARY															
79	Short Term FFVSF - GROSS	3	0.68	1.25	3.89	2.38	0.28	1.72	0.22	0.38	3.89	1.42	1.57			01/01/1988
	ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Short Term FFVSF - NET MGR			1.25	3.89	2.38	0.28	1.72	0.22	0.38	3.89	1.42	1.57			
83	Cash Account	0	0.00													
85	Securities Lending	0	0.00													

STATE STREET

New York City
Firefighters' Variable Supplements Fund

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

STATE STREET

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
EQUITY SUMMARY										
US EQUITY										
BlackRock US SCG R2000	$5	1.19	7.01	18.46	13.50	(26.38)	3.35	34.42	28.39	(9.14)
RUSSELL 2000 GROWTH DAILY			7.05	18.53	13.55	(26.36)	2.83	34.63	28.48	(9.31)
Excess			(0.04)	(0.07)	(0.05)	(0.02)	0.51	(0.21)	(0.09)	0.17
BlackRock US SCV R2000	$5	1.14	3.14	6.06	2.58	(14.51)	28.48	4.87	22.60	(12.79)
RUSSELL 2000 VALUE DAILY			3.18	6.01	2.50	(14.48)	28.27	4.63	22.39	(12.86)
Excess			(0.05)	0.06	0.08	(0.03)	0.21	0.24	0.20	0.08
BlackRock US LMC R1000 Core	$167	37.57	8.57	19.13	16.67	(19.26)	26.55	20.92	31.26	
RUSSELL 1000 (DAILY)			8.58	19.36	16.68	(19.13)	26.45	20.96	31.43	
Excess			(0.01)	(0.24)	(0.02)	(0.13)	0.09	(0.05)	(0.17)	
NON - US EQUITY										
SSGA WorldxUS LMC NYC Custom IDX	$73	16.42	3.24	17.86	11.59	(13.84)	12.90	8.09	22.75	(13.64)
NYC Custom World ex US Index [1]			3.03	17.41	11.29	(14.29)	12.62	7.59	22.49	(14.09)
Excess			0.21	0.45	0.30	0.45	0.28	0.50	0.26	0.45
SSGA WORLD EX USA SMALL CAP [2]	$12	2.65	0.58	10.26	5.63	(20.23)	11.27	13.16	25.67	(17.97)
World ex USA SC PASSIVE CUSTOM BM [3]			0.49	10.05	5.50	(20.58)	11.14	12.78	25.41	(18.07)
Excess			0.10	0.21	0.13	0.36	0.14	0.38	0.26	0.10
EMERGING MARKETS										
BlackRock MSCI EM Core	$31	7.04	0.86	2.05	5.10	(19.62)	(2.01)	17.27	18.76	(14.44)
MSCI EMERGING MARKETS			0.90	1.75	4.89	(20.09)	(2.54)	18.31	18.42	(14.57)
Excess			(0.03)	0.30	0.21	0.47	0.54	(1.04)	0.34	0.13

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
FIXED INCOME SUMMARY										
STRUCTURED FIXED INCOME										
SSGA-Core US Agg	$148	33.30	(0.83)	(0.77)	2.43	(13.02)	(1.77)	7.70	8.72	(0.25)
Bloomberg U.S. Aggregate			(0.84)	(0.94)	2.09	(13.01)	(1.54)	7.51	8.72	0.01
Excess			0.02	0.16	0.33	(0.01)	(0.23)	0.19	0.01	(0.26)
CASH										
Short Term FFVSF	$3	0.68	1.25	3.89	2.38	1.72	0.22	0.38	2.10	1.51
ICE BofA US 3-Month Treasury Bill			1.17	3.59	2.25	1.46	0.05	0.67	2.28	1.87
Excess			0.08	0.30	0.12	0.26	0.17	(0.29)	(0.18)	(0.37)
Cash Account	$0	0.00								
Securities Lending	$0	0.00								

New York City
Firefighters' Variable Supplements Fund

Appendix C

Footnotes

Glossary of Terms

Through June 30, 2023

STATE STREET

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New York City
Fire Department Pension Fund, Subchapter Two
Performance Overview as of June 30, 2023

Total Fund Overview

STATE STREET

New York City
Fire Department Pension Fund, Subchapter Two

Table of Contents:

Consultant's Commentary

Through June 30, 2023

STATE STREET

Equity Markets
U.S. markets outperformed on a relative basis with the S&P 500 Index gaining 6.6%, while the MSCI EAFE Index was up 4.6% in June. During this period, emerging markets also trailed the U.S. with the MSCI EM Index returning 3.8%. Growth stocks modestly outperformed value equities in June with the Russell 1000 Growth Index gaining 6.8% and the Russel 1000 Value Index up 6.6%.

Keeping in mind the dynamics of U.S. equities, we suggest investors reduce S&P 500 exposure, while maintaining U.S. large-cap value positions. We also recommend investors increase exposure to U.S. high-yield bonds and broadly evaluate the risk-return benefit of fixed income. Lastly, we suggest holding greater levels of cash within safe-haven fixed-income exposures and encourage investors to maintain greater levels of portfolio liquidity.

Fixed Income
With the Federal Reserve opting to skip an interest rate hike and the slew of robust economic data, the U.S. economy continued to flex its muscles in June. Despite the Fed’s decision to forgo a rate hike in June while ascertaining the health of the labor market and economy, Fed chair Jerome Powell reiterated the central bank’s job isn’t done until inflation comes down to its stated target of 2%, ratcheting up the likelihood of more rate hikes in the future.

In fixed income, returns were mostly in the red driven by the upward pressure on interest rates. In particular, U.S. Treasury yields moved higher with 10-year yields increasing 18 basis points. Credit markets were higher though mainly due to the high carry over Treasuries. High-yield bonds returned 1.7% in June with spreads tightening to 390 basis points from 455 basis points.

Performance (net of fees)
For the quarter, the Fund returned 2.68%, underperforming the policy index return by 57 basis points. Over the trailing 3-year period, the Fund returned 7.51%, outperforming the policy index by 50 basis points.

Equity Composite (net of fees)
For the end of the quarter, the total equity composite (including alternatives and REITS) returned 4.20% for the quarter. For the 3-year period the portfolio returned 12.22%. For the quarter, total equity assets represented 66.08% of the total Fund assets.

For the quarter, domestic equity assets represented 27.71% of the total Fund assets. The Total Domestic Equity Portfolio returned 7.16%, underperforming the Russell 3000 Index by 122 basis points. The domestic equity portfolio is lagging its index by 9 basis points for the 3-year period.

For the quarter, World ex-US equity assets represented 7.54% of the total Fund assets. The Total World ex-US Portfolio returned 3.17%, outperforming its index by 49 basis points. World ex-US portfolio is underperforming its index by 51 basis points for the 3-year period.

Credit/Fixed Income Composites (net of fees)
For the quarter, total fixed income assets (including cash and alternative credit assets) represented 33.92% of the total Fund assets. The portfolio returned -0.17% for the quarter. The portfolio returned -0.95% for the 3-year period.

For the quarter, the structured fixed income portfolio represented 18.38% of the total Fund assets. The portfolio returned -0.89% for the quarter, outperforming its index. The portfolio returned -4.58% for the 3-year period.

For the quarter, high yield portfolio assets represented 5.77% of the total Fund assets. The portfolio returned 1.74% for the quarter, slightly underperforming its index. The portfolio returned 3.68% for the 3-year period.

For the quarter, the opportunistic fixed income assets represented 3.95% of the total Fund assets. The portfolio returned 1.63% for the quarter, underperforming its index for the quarter. The portfolio returned 10.83% for the 3-year period.

Real Estate and Infrastructure Composites
For the quarter, private real estate assets represented 6.30% of the total Fund assets. The portfolio returned (time-weighted, net of fees) -1.85% for the quarter, outperforming its index for the quarter by 78 basis points. The portfolio returned 12.78% for the 3-year period.

For the quarter, infrastructure assets represented 2.00% of the total Fund assets. The portfolio returned (time-weighted, net of fees) 2.57% for the quarter, outperforming its index for the quarter by 91 basis points. The portfolio returned 13.93% for the 3-year period.

Private Equity Composites (time weighted)
For the quarter, private equity assets represented 9.31% of the total Fund assets. The portfolio returned (time-weighted, net of fees) 2.31% for the quarter, underperforming its index for the quarter by 565 basis points. The portfolio returned 23.53% for the 3-year period.

NYC's HF allocation:
The allocation to hedge funds as of June 30, 2023 was $918.0 million, 4.9% of the total fund. The second quarter return for the hedge fund portfolio was +2.3%, outperforming the HFRI FOF Composite Index + 1% p.a. return of +1.7%, and outperforming the 1 Yr. T-bill yield + 4% p.a. return of +0.4%.

Consultant's Commentary

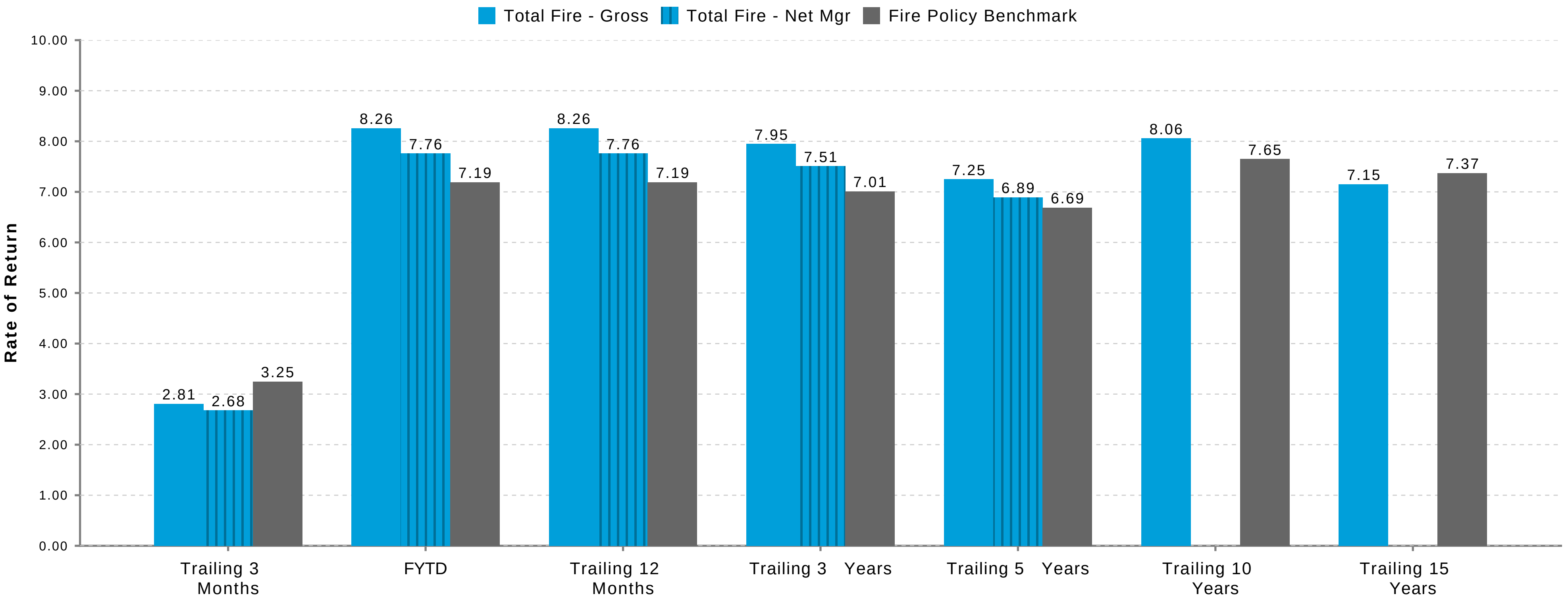
Through June 30, 2023

Note: 1Yr. T-bill + 4% p.a. calculated using Barclays U.S. Treasury: 1-3 Year + 4% p.a.

Total Portfolio Returns: June 30, 2023

STATE STREET

	Market Value (Billions)
TOTAL FIRE	$18.7

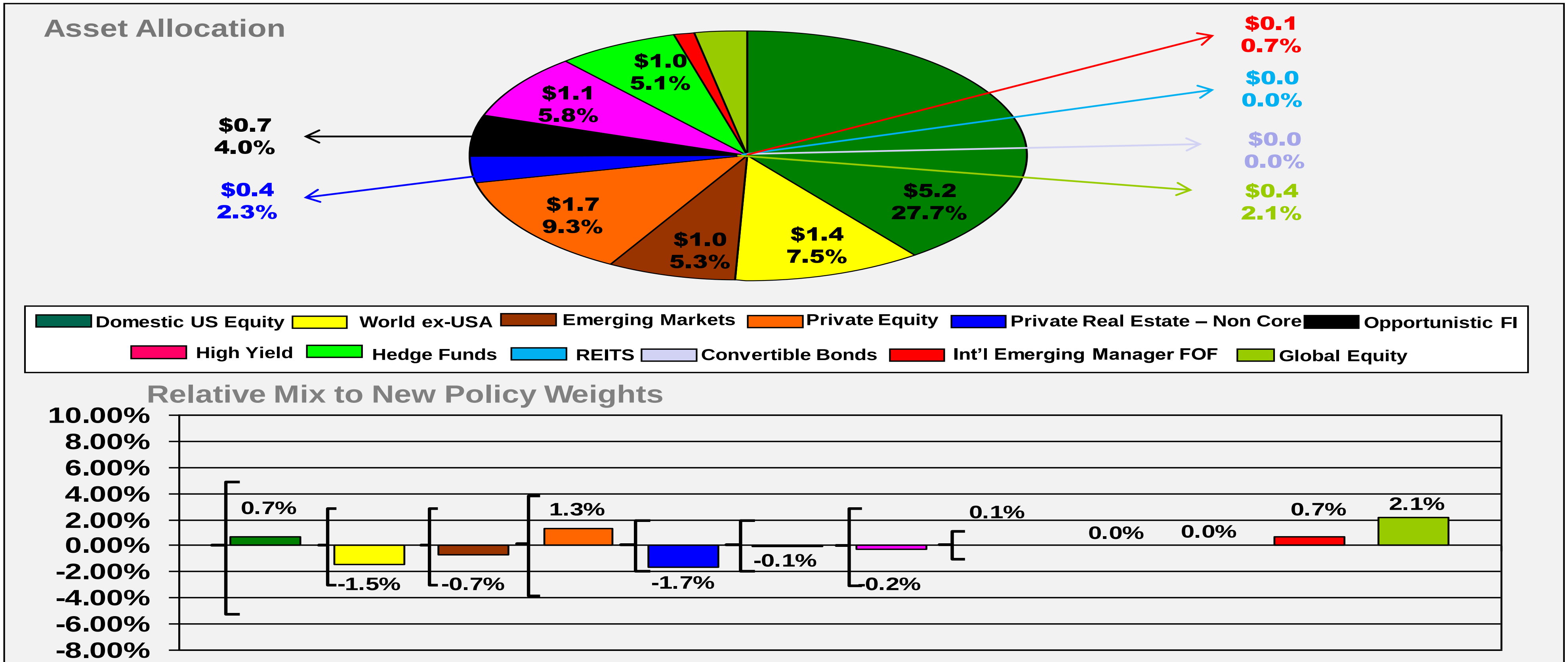


	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 10 Years	Benchmark 10 Years
Standard Deviation						
TOTAL FIRE	9.5	10.1	7.2	10.3	7.8	8.2

Portfolio Asset Allocation: June 30, 2023

STATE STREET

Portfolio Asset Allocation – Growth

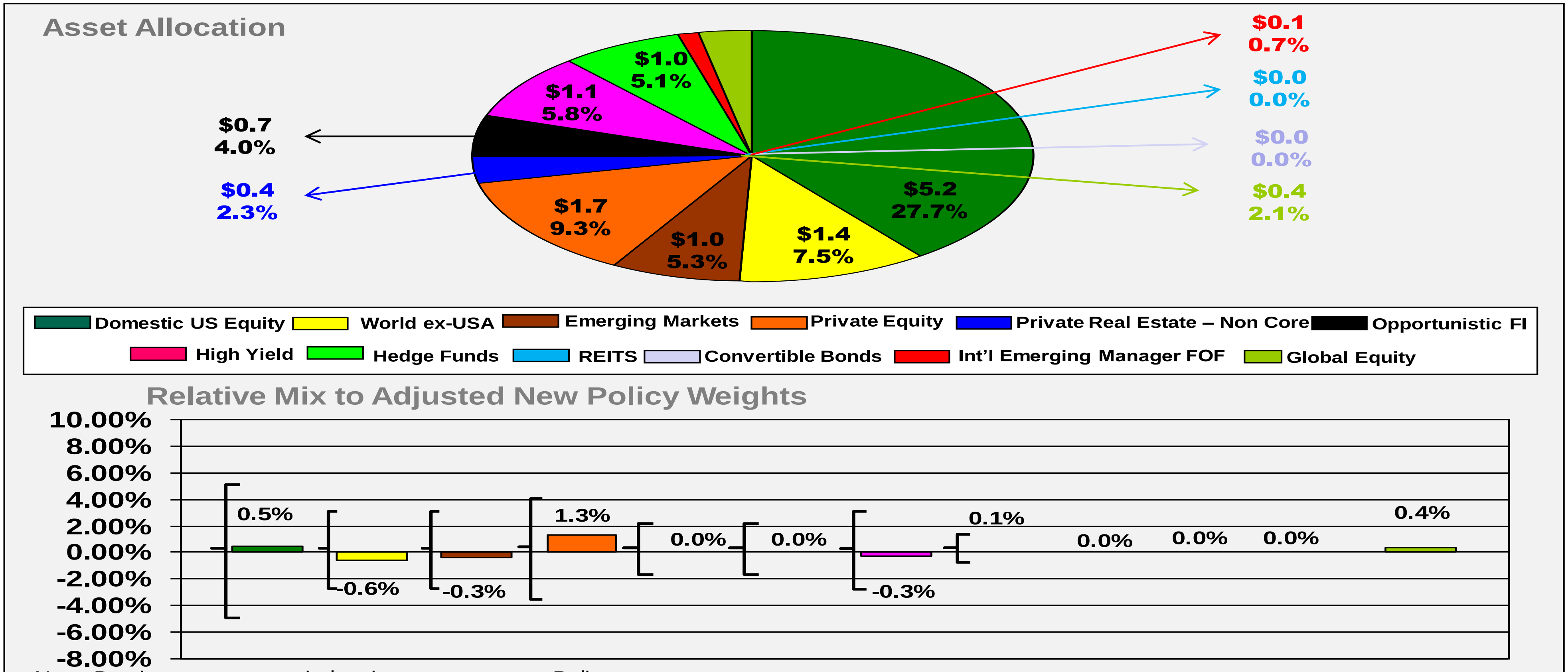


Note: Brackets represent rebalancing ranges versus Policy.

Portfolio Asset Allocation: June 30, 2023

STATE STREET

Portfolio Asset Allocation – Growth

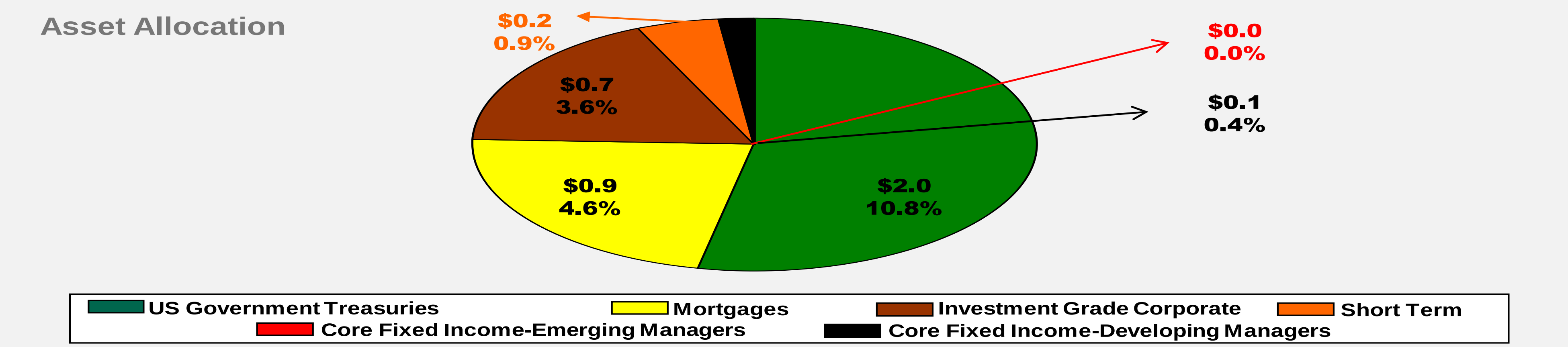


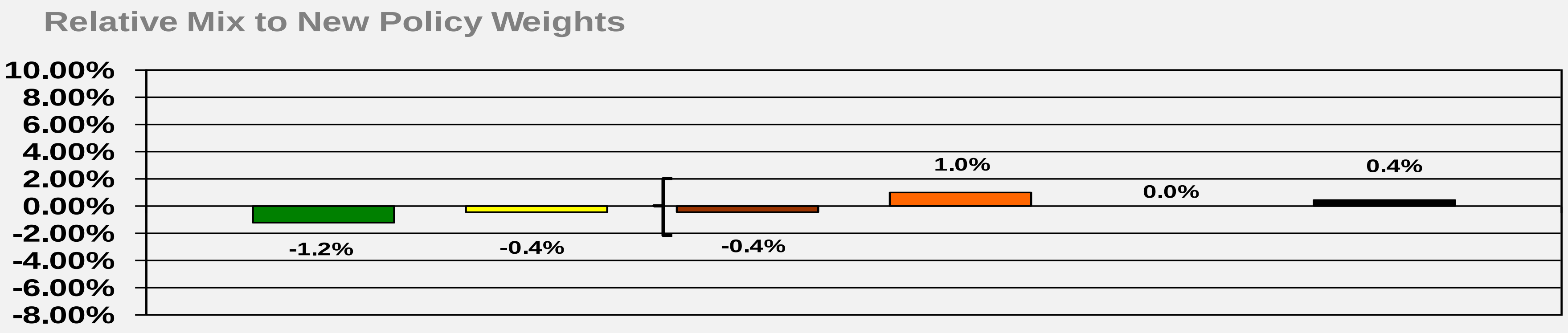
Note: Brackets represent rebalancing ranges versus Policy.

Portfolio Asset Allocation: June 30, 2023

STATE STREET

Portfolio Asset Allocation – Deflation Protection

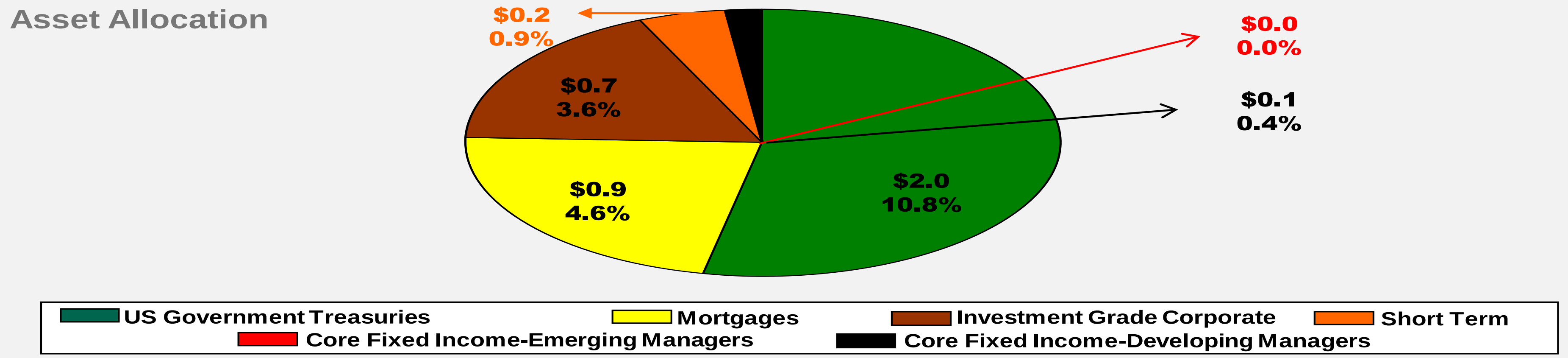


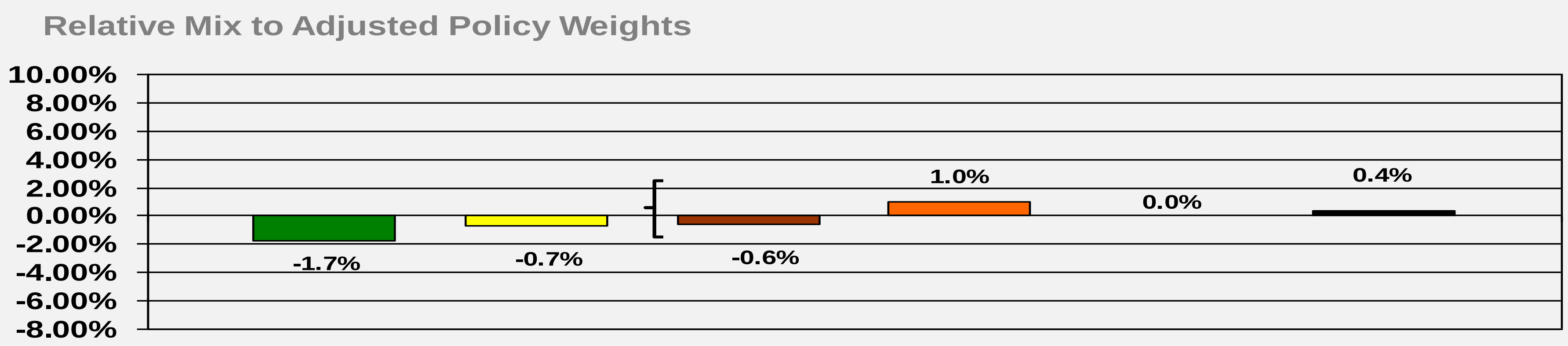


Portfolio Asset Allocation: June 30, 2023

STATE STREET

Portfolio Asset Allocation – Deflation Protection

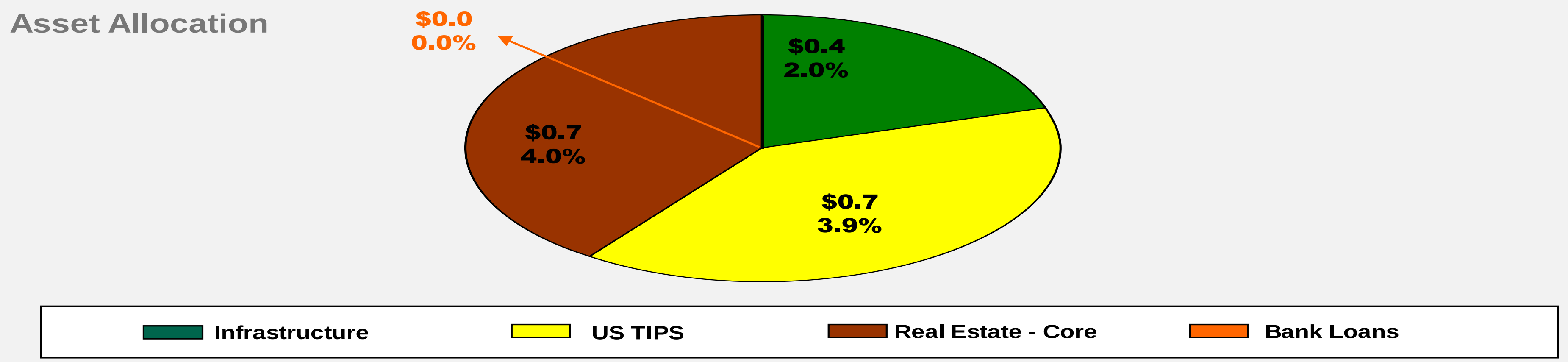


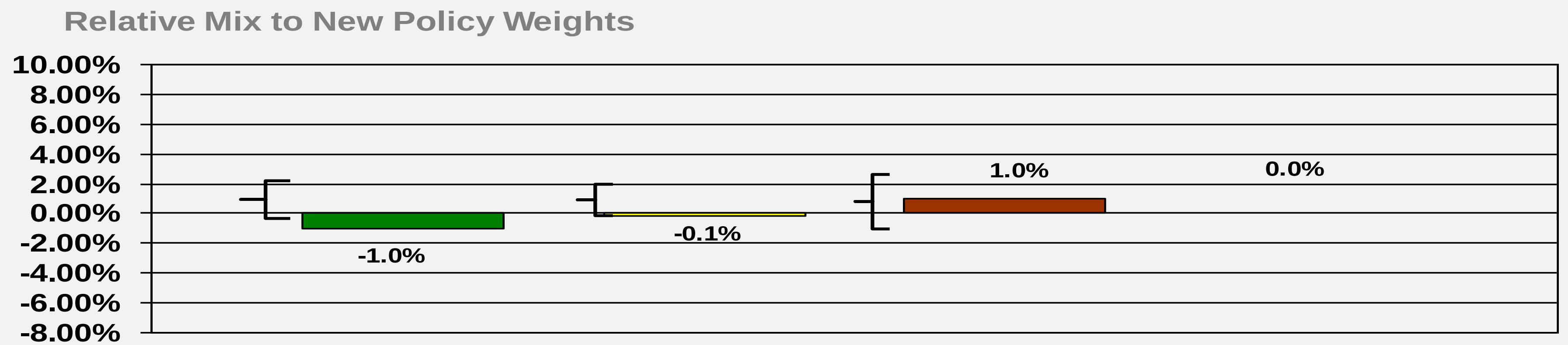


Portfolio Asset Allocation: June 30, 2023

STATE STREET

Portfolio Asset Allocation – Inflation Protection



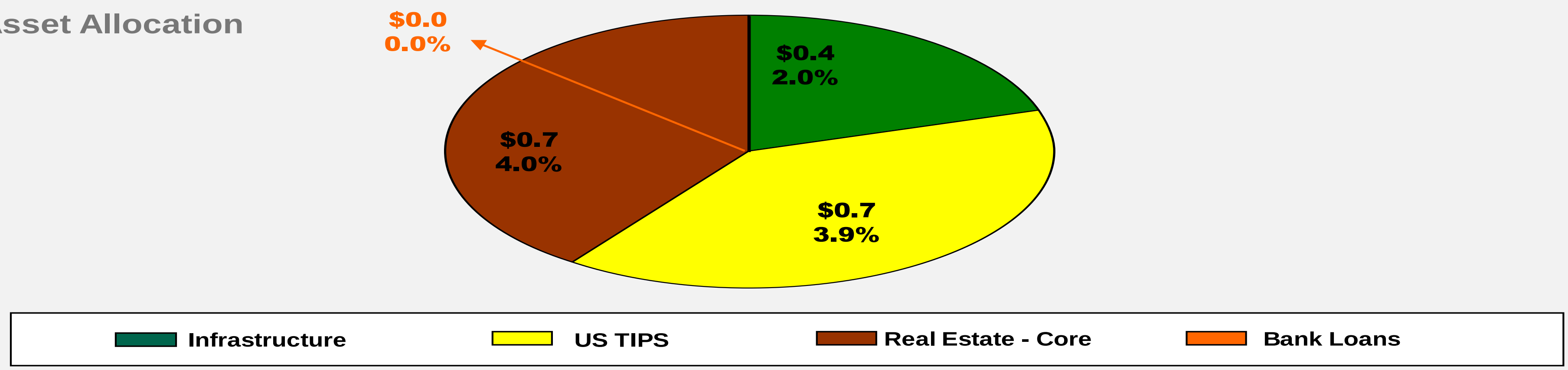


Note: Brackets represent rebalancing ranges versus Policy.

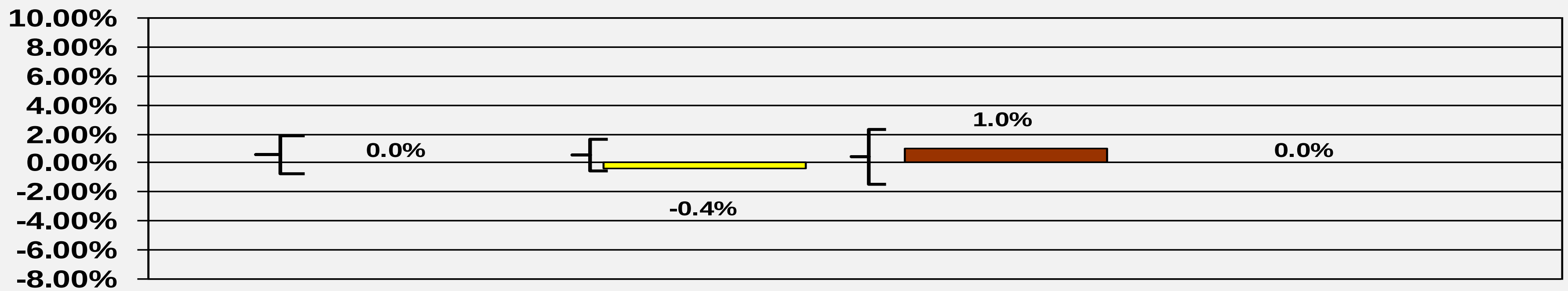
Portfolio Asset Allocation: June 30, 2023

Portfolio Asset Allocation – Inflation Protection

Asset Allocation



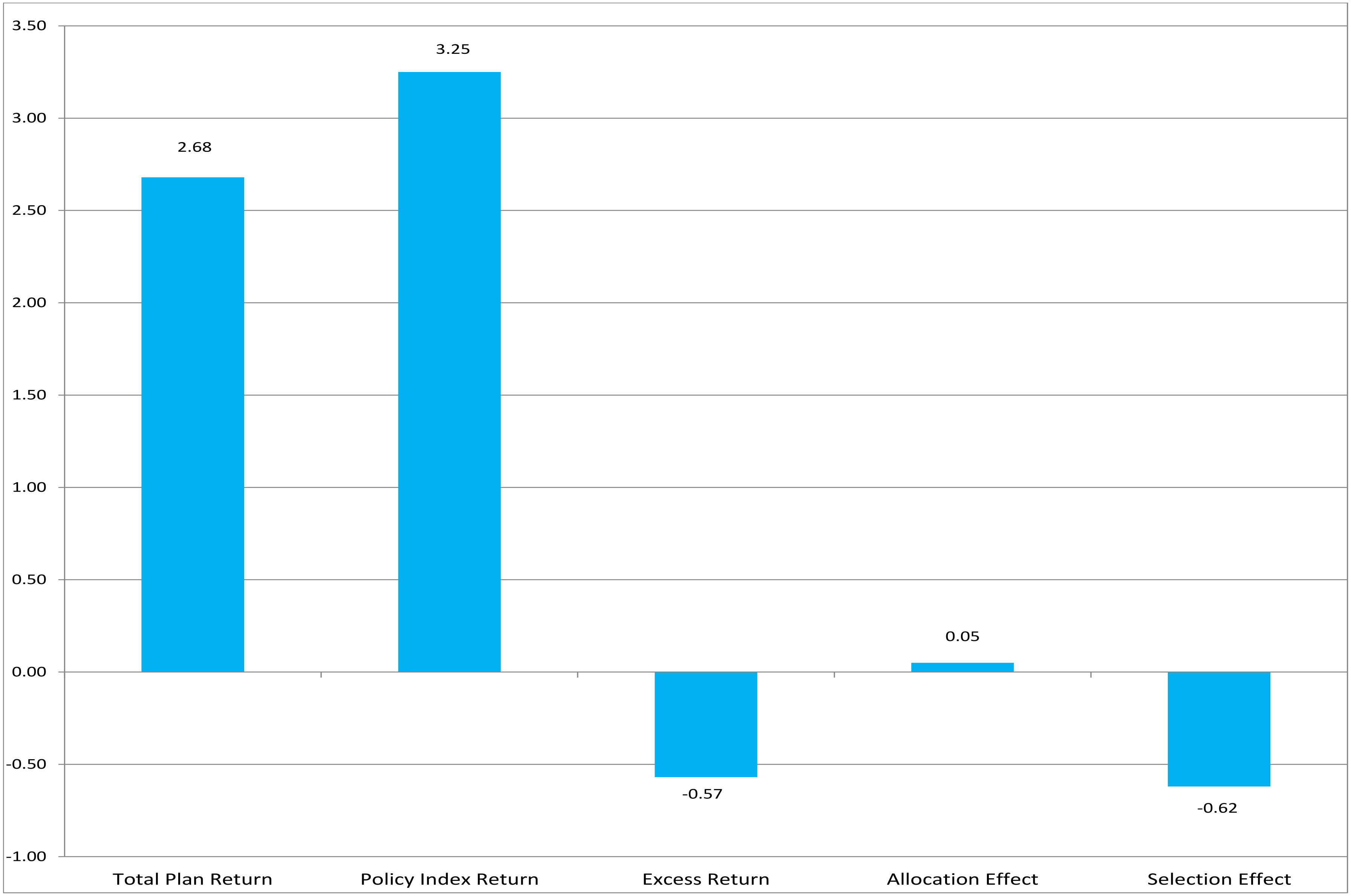
Relative Mix to Adjusted Policy Weights



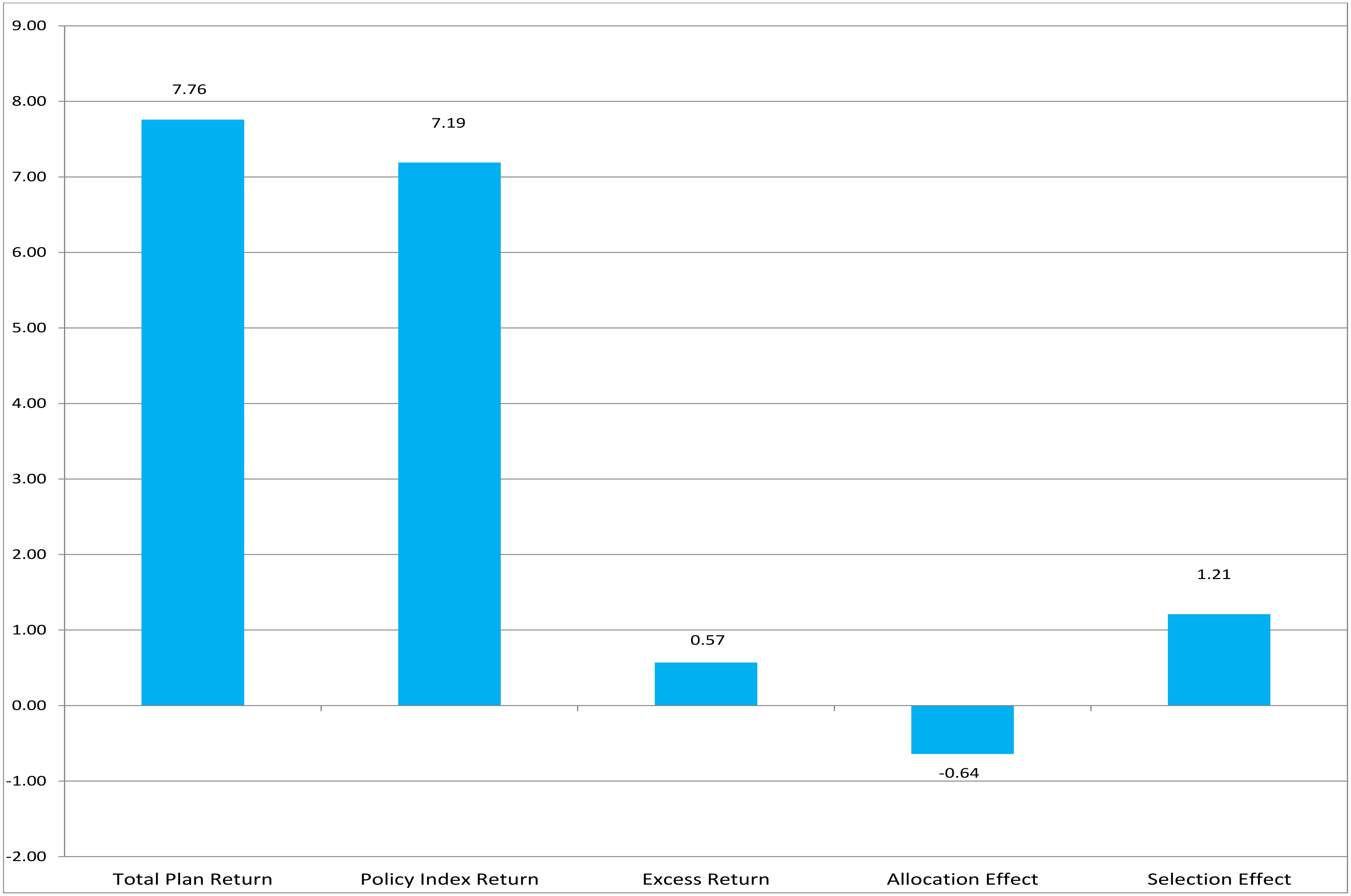
Note: Brackets represent rebalancing ranges versus Policy.

Performance Attribution: Total Plan - Quarter Ending: June 30, 2023

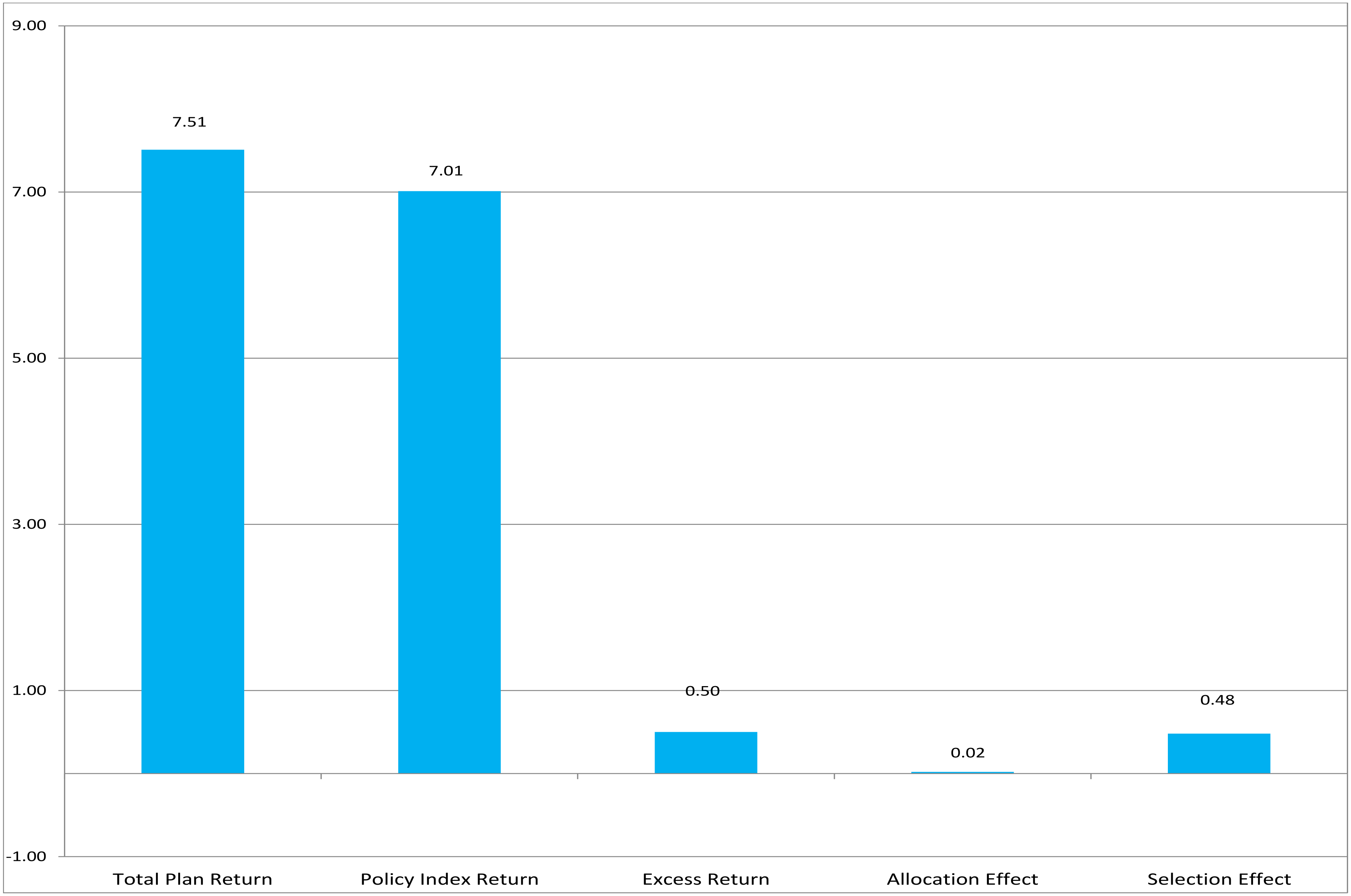
STATE STREET



Performance Attribution: Total Plan - Fiscal Year to Date: June 30, 2023



Performance Attribution: Total Plan - 3 Years Ending: June 30, 2023



Total Plan: June 30, 2023

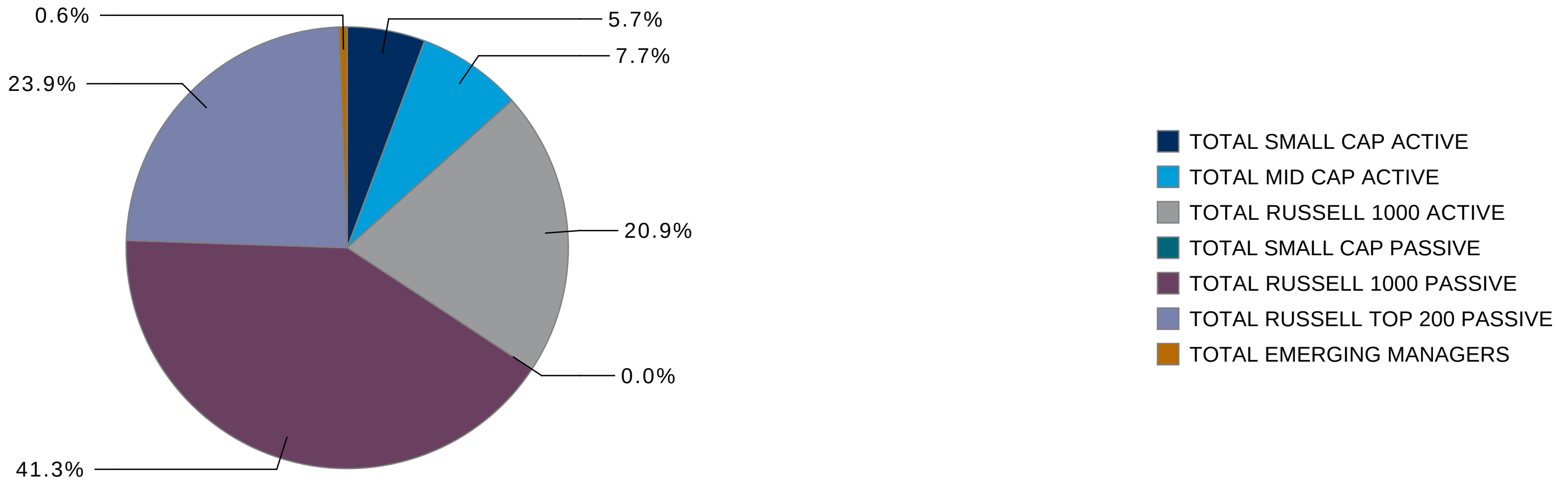
STATE STREET

Allocation Effect - Asset Class Breakdown	Quarter	FYTD	3 Years	Benchmark
TOTAL FIRE	0.05	-0.64	0.02	Fire Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.02	-0.17	-0.09	RUSSELL 3000
TOTAL WORLD ex-USA	-0.01	-0.07	-0.02	MSCI World Ex USA IMI Net
TOTAL EMERGING MARKETS	0.01	-0.04	-0.01	MSCI Emerging Markets
TOTAL GLOBAL EQUITY	0.01	0.01	0.01	MSCI AC WORLD
TOTAL INTERNATIONAL FOF	0.00	0.00	0.00	MSCI ACWI Ex US IMI Net
TOTAL HEDGE FUNDS	0.00	-0.03	-0.02	HFRI Fund of Funds Composite Index plus 1%
TOTAL REAL ESTATE SECURITIES	0.00	0.00	-0.02	Dow Jones US Select Securities Index
TOTAL PRIVATE EQUITY	0.06	-0.17	-0.03	Russell 3K + 300bps
TOTAL PRIVATE REAL ESTATE - CORE	-0.07	-0.26	-0.03	NCREIF ODCE net
TOTAL PRIVATE REAL ESTATE - NON CORE	0.00	-0.01	0.01	NCREIF ODCE net + 200bps
TOTAL INFRASTRUCTURE	0.00	0.00	0.00	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.04	0.06	0.17	FTSE US Government Bond 1-3 Years Index
TOTAL US TREASURY INTERMEDIATE	-0.01	-0.04	-0.01	USBIG TSY AGN 1-10
TOTAL ACTIVE GOVERNMENT	-0.01	-0.01	-0.09	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	0.04	0.09	0.20	FTSE US Government Bond 10+ Years Index
TOTAL INVESTMENT GRADE CORPORATE	0.02	0.03	0.09	NYC Custom IGC Benchmark
TOTAL MORTGAGES	0.02	0.04	0.07	NYC Custom Mortgage Benchmark
TOTAL ETI	0.00	0.00	0.00	ETI Custom Benchmark
TOTAL CORE FI- DEVELOPING MGRS	-0.02	-0.04	-0.06	Bloomberg U.S. Aggregate
TOTAL HIGH YIELD	0.00	-0.02	0.01	High Yield Custom Benchmark
TOTAL BANK LOANS	0.00	0.00	-0.02	Credit Suisse Lev Loan Index
TOTAL TIPS MANAGERS	0.01	0.01	0.00	Bloomberg Global Infl-Linked: U.S. TIPS
TOTAL OPPORTUNISTIC FIXED	0.00	0.00	0.00	OFI - JPMGHY / CSFB 50/50 Blend Plus 300
TOTAL CASH	-0.02	-0.02	-0.14	

Selection Effect - Asset Class Breakdown	Quarter	FYTD	3 Years	Benchmark
TOTAL FIRE	-0.62	1.21	0.48	Fire Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.32	-0.23	-0.03	RUSSELL 3000
TOTAL WORLD ex-USA	0.04	0.33	-0.05	MSCI World Ex USA IMI Net
TOTAL EMERGING MARKETS	0.13	0.32	0.13	MSCI Emerging Markets
TOTAL GLOBAL EQUITY	0.02	0.14	-0.05	MSCI AC WORLD
TOTAL INTERNATIONAL FOF	0.00	0.01	0.01	MSCI ACWI Ex US IMI Net
TOTAL HEDGE FUNDS	0.02	-0.11	-0.09	HFRI Fund of Funds Composite Index plus 1%
TOTAL REAL ESTATE SECURITIES	0.00	0.00	0.00	Dow Jones US Select Securities Index
TOTAL PRIVATE EQUITY	-0.53	0.39	0.11	Russell 3K + 300bps
TOTAL PRIVATE REAL ESTATE-CORE	-0.01	0.40	0.18	NCREIF ODCE net
TOTAL PRIVATE REAL ESTATE-NON CORE	0.06	0.21	0.10	NCREIF ODCE net + 200bps
TOTAL INFRASTRUCTURE	0.02	0.02	0.05	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.00	0.00	0.00	FTSE US Government Bond 1-3 Years Index
TOTAL US TREASURY INTERMEDIATE	0.00	0.01	0.00	USBIG TSY AGN 1-10
TOTAL ACTIVE GOVERNMENT	0.00	0.00	0.00	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	0.00	0.02	0.00	FTSE US Government Bond 10+ Years Index
TOTAL INVESTMENT GRADE CORPORATE	0.01	0.00	0.00	NYC Custom IGC Benchmark
TOTAL MORTGAGES	0.00	0.01	0.01	NYC Custom Mortgage Benchmark
TOTAL ETI	0.00	0.00	0.00	ETI Custom Benchmark
TOTAL CORE FI- DEVELOPING MGRS	0.00	0.01	0.00	Bloomberg U.S. Aggregate
TOTAL HIGH YIELD	0.00	0.00	0.03	High Yield Custom Benchmark
TOTAL BANK LOANS	0.00	0.00	-0.01	Credit Suisse Lev Loan Index
TOTAL TIPS MANAGERS	0.00	0.00	0.00	Bloomberg Global Infl-Linked: U.S. TIPS
TOTAL OPPORTUNISTIC FIXED	-0.06	-0.34	0.08	OFI - JPMGHY / CSFB 50/50 Blend Plus 300
TOTAL CASH	0.00	0.00	0.00	

Total Domestic Equity Asset Allocations: June 30, 2023

	Market Value (Billions)
TOTAL DOMESTIC EQUITY	$5.2

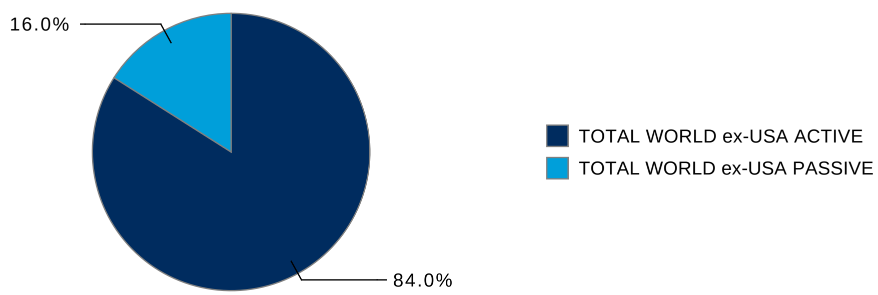


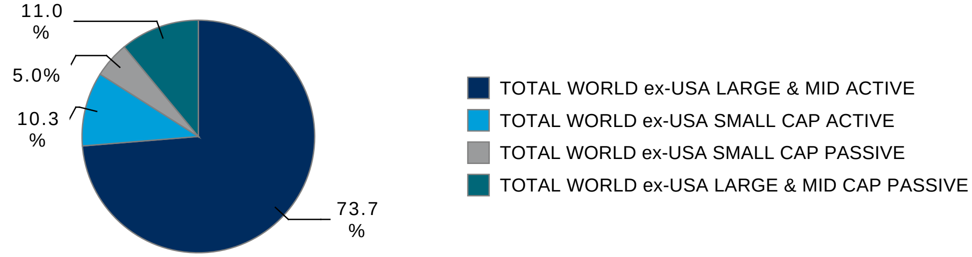
				Quarterly Returns		
	Policy Weight	Actual Weight	Under/Over Weight	Fund	Benchmark	Excess
TOTAL SMALL CAP ACTIVE	5.8	5.7	(0.1)	6.1	5.2	0.9
TOTAL MID CAP ACTIVE	7.7	7.7	0.0	4.7	4.8	(0.1)
TOTAL RUSSELL 1000 ACTIVE	18.0	20.9	2.9	2.8	8.6	(5.7)
TOTAL SMALL CAP PASSIVE	0.0	0.0	0.0	5.4	5.2	0.2
TOTAL RUSSELL 1000 PASSIVE	45.1	41.3	(3.8)	8.6	8.6	(0.0)
TOTAL RUSSELL TOP 200 PASSIVE	22.9	23.9	1.0	9.9	9.9	(0.0)
TOTAL EMERGING MANAGERS	0.5	0.6	0.1	2.8	5.2	(2.4)

Totals may not add due to rounding

World ex-USA Equity Asset Allocation: June 30, 2023

	Market Value (Billions)	% of Plan
TOTAL WORLD ex-USA	$1.4	7.5



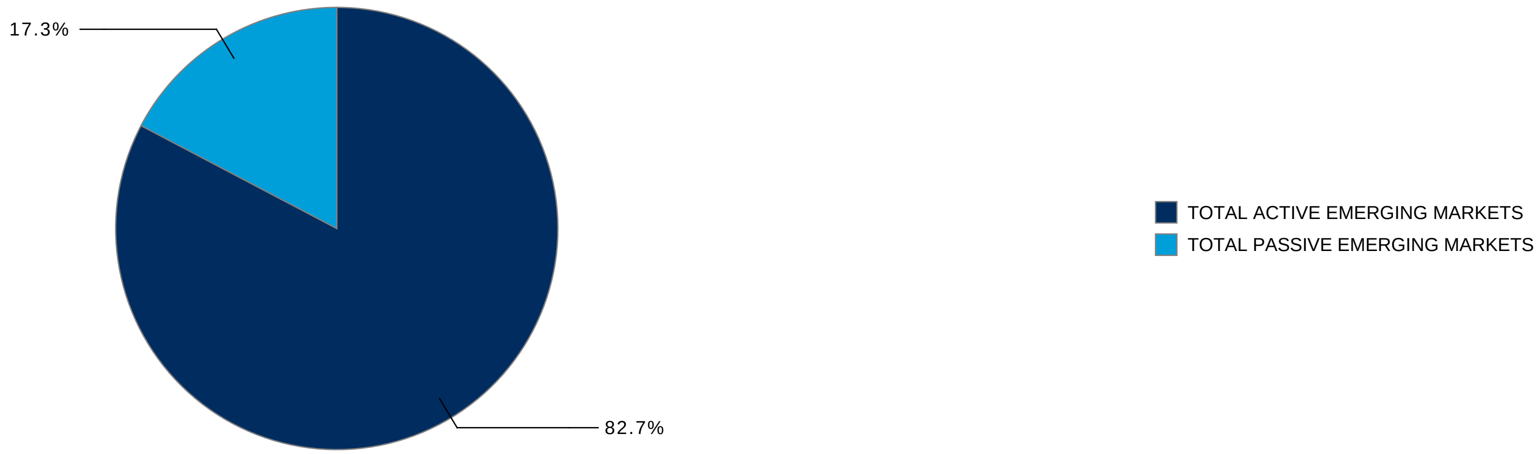


		Quarterly Returns		
	Asset Class Weight	Fund	Benchmark	Excess
TOTAL WORLD ex-USA LARGE & MID ACTIVE	73.72	3.75	3.03	0.72
TOTAL WORLD ex-USA SMALL CAP ACTIVE	10.25	0.43	0.17	0.26
TOTAL WORLD ex-USA SMALL CAP PASSIVE	4.98	0.58	0.49	0.10
TOTAL WORLD ex-USA LARGE & MID CAP PASSIVE	11.04	3.24	3.03	0.21
TOTAL WORLD ex-USA	100.00	3.17	2.67	0.49

Totals may not add due to rounding

Emerging Markets Equity Asset Allocation: June 30, 2023

	Market Value (Millions)	% of Plan
TOTAL EMERGING MARKETS	$991.4	5.3



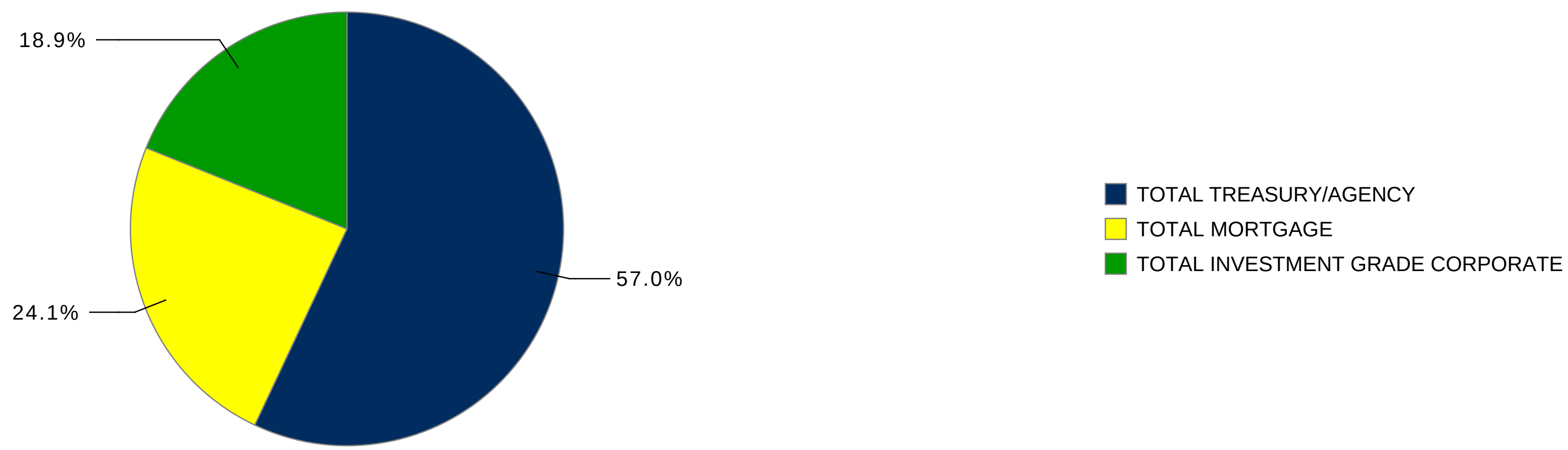
	Asset Class Weight	Quarterly Returns		
		Fund	Benchmark	Excess
TOTAL ACTIVE EMERGING MARKETS	82.67	3.92	0.90	3.02
TOTAL PASSIVE EMERGING MARKETS	17.33	0.86	0.90	(0.03)
TOTAL EMERGING MARKETS	100.00	3.38	0.90	2.48

Totals may not add due to rounding

Structured Fixed Income Asset Allocation: June 30, 2023

STATE STREET

	Market Value (Billions)	% of Plan
TOTAL STRUCTURED+ETI	$3.6	19.0



	Policy Weight	Actual Weight	Under/Over Weight	Quarterly Returns		
				Fund	Benchmark	Excess
TOTAL TREASURY/AGENCY	57.14	56.97	(0.17)	(1.26)	(1.25)	(0.01)
TOTAL MORTGAGE	23.81	24.10	0.29	(0.63)	(0.64)	0.02
TOTAL INVESTMENT GRADE CORPORATE	19.05	18.93	(0.12)	(0.14)	(0.29)	0.15

Totals may not add due to rounding

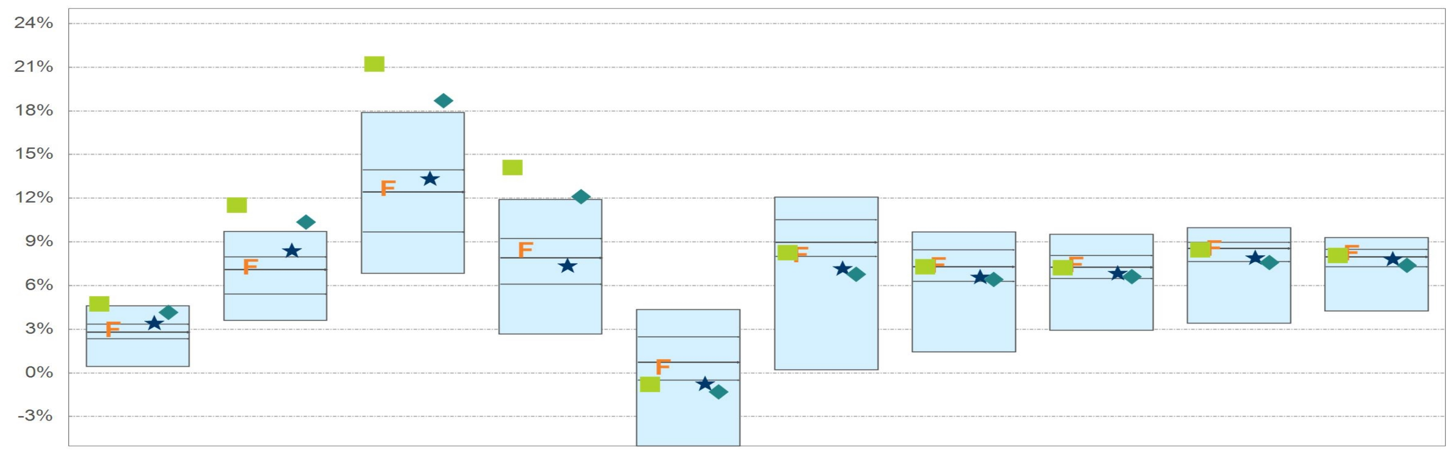
Through June 30, 2023

STATE STREET

Wilshire

City of New York
Performance Comparison

Total Returns of Master Trusts - Public : Plans > $1 Billion
Cumulative Periods Ending : June 30, 2023



Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	4.60	9.71	17.88	11.90	4.36	12.06	9.67	9.51	9.96	9.29
25th	3.36	7.98	13.94	9.22	2.48	10.52	8.47	8.07	8.97	8.50
50th	2.79	7.11	12.44	7.92	0.73	8.96	7.29	7.25	8.55	7.97
75th	2.35	5.43	9.69	6.09	-0.51	8.00	6.28	6.49	7.66	7.29
95th	0.44	3.61	6.84	2.68	-5.02	0.20	1.45	2.92	3.41	4.26
No. Of Obs	80	78	77	77	75	75	72	66	66	66
F Total System - Fire	2.81 (48)	7.11 (50)	12.48 (48)	8.26 (42)	0.23 (58)	7.95 (77)	7.22 (54)	7.25 (50)	8.38 (53)	8.06 (43)
★ Fire Policy Benchmark	3.25 (31)	8.23 (18)	13.17 (35)	7.19 (59)	-0.91 (75)	7.01 (84)	6.43 (70)	6.69 (68)	7.74 (70)	7.65 (67)
■ Public Mkt Equiv 25	4.55 (5)	11.33 (1)	21.03 (1)	13.93 (1)	-0.97 (76)	8.08 (72)	7.09 (59)	7.03 (60)	8.25 (56)	7.86 (56)
◆ Public Mkt Equiv 35	3.95 (8)	10.17 (3)	18.52 (2)	11.90 (5)	-1.50 (83)	6.58 (85)	6.23 (76)	6.43 (76)	7.39 (81)	7.21 (79)

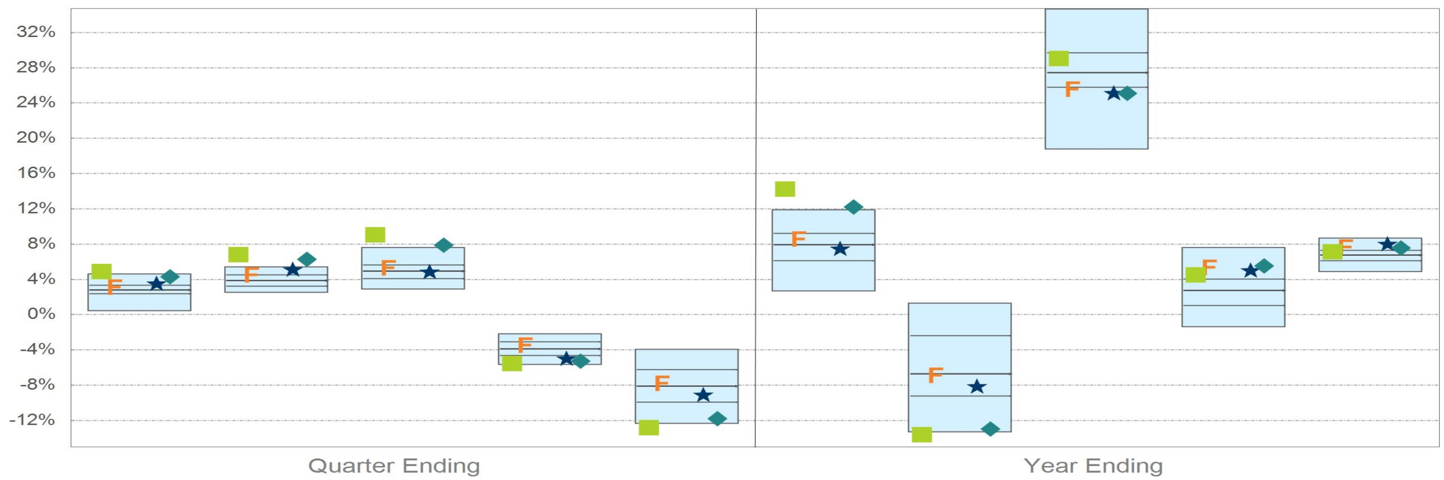
Wilshire Trust Universe Comparison Service® (TUCS®)

Through June 30, 2023

Wilshire

City of New York
Performance Comparison

Total Returns of Master Trusts - Public : Plans > $1 Billion
Consecutive Time Periods: June 30, 2023



Percentile Rankings	Jun 23	Mar 23	Dec 22	Sep 22	Jun 22	Jun 23	Jun 22	Jun 21	Jun 20	Jun 19
5th	4.60	5.43	7.61	-2.17	-3.96	11.90	1.32	34.66	7.61	8.70
25th	3.36	4.50	5.63	-3.06	-6.25	9.22	-2.36	29.67	4.05	7.27
50th	2.79	3.86	4.93	-3.86	-8.13	7.92	-6.71	27.46	2.77	6.77
75th	2.35	3.21	4.08	-4.64	-9.92	6.09	-9.21	25.77	1.02	6.13
95th	0.44	2.54	2.93	-5.65	-12.35	2.68	-13.27	18.80	-1.37	4.90
No. Of Obs	80	78	79	80	79	77	78	80	75	69
F Total System - Fire	2.81 (48)	4.19 (35)	5.01 (47)	-3.76 (46)	-8.13 (50)	8.26 (42)	-7.20 (55)	25.23 (78)	5.05 (17)	7.37 (20)
★ Fire Policy Benchmark	3.25 (31)	4.81 (13)	4.57 (60)	-5.28 (91)	-9.39 (68)	7.19 (59)	-8.41 (64)	24.81 (81)	4.73 (19)	7.73 (16)
■ Public Mkt Equiv 25	4.55 (5)	6.48 (1)	8.71 (1)	-5.87 (95)	-13.15 (96)	13.93 (1)	-13.92 (95)	28.74 (36)	4.17 (23)	6.81 (45)
◆ Public Mkt Equiv 35	3.95 (8)	5.98 (1)	7.58 (5)	-5.59 (93)	-12.10 (92)	11.90 (5)	-13.30 (95)	24.77 (82)	5.21 (14)	7.25 (25)

Wilshire Trust Universe Comparison Service® (TUCS®)

2

Actual Fees Incurred

STATE STREET

FIRE RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2022

INVESTMENT STYLE (EQUITIES)	Avg. Net Asset Value FY 2022 ($MM)	Base Mgmt. Fees ($M)	Partnership Fees ($M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in ($M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in ($M)	Total Investment Mgmt. Fees in BPS
Total US Equities	**5,348.98**	**5,040.35**	**-**	**9.42**	**948.99**	**1.77**	**5,989.34**	**11.20**
Small Cap Active:	334.74	2,771.30	-	82.79	926.28	27.67	3,697.58	110.46
Small Cap Growth	136.81	1,675.97	-	122.50	753.86	55.10	2,429.83	177.60
Small Cap Value	132.88	660.44	-	49.70	-	-	660.44	49.70
Small Cap Core	65.05	434.89	-	66.86	172.42	26.51	607.31	93.37
Small Cap Fundamental Index	-	-	-	-	-	-	-	-
Mid Cap Active:	296.11	981.37	-	33.14	-	-	981.37	33.14
Mid Cap Growth	38.05	164.86	-	43.32	-	-	164.86	43.32
Mid Cap Value	52.37	184.14	-	35.16	-	-	184.14	35.16
Mid Cap Core	205.69	632.38	-	30.74	-	-	632.38	30.74
Other Active:	1,119.35	1,181.90	-	10.56	22.70	0.20	1,204.61	10.76
Russell 1000 Fundamental	1,088.67	1,007.31	-	9.25	-	-	1,007.31	9.25
Legato (Emerging Manager- Equity)	30.68	174.59	-	56.90	22.70	7.40	197.29	64.30
U.S. Environmental Managers	-	-	-	-	-	-	-	-
Total US Active Equities	1,750.19	4,934.58	-	28.19	948.99	5.42	5,883.56	33.62
Small Cap Passive:							-	
Small Cap Passive	0.04	0.00	-	0.28	-	-	0.00	0.28
Mid Cap Passive:								
Mid Cap Passive	-	-	-	-	-	-	-	-
Russell / S&P Passive:	3,598.74	105.77	-	0.29	-	-	105.77	0.29
Russell 1000 Growth Passive	-	-	-	-	-	-	-	-
Russell 1000 Value Passive	-	-	-	-	-	-	-	-
Russell 1000 Core Passive	2,591.32	52.14	-	0.20	-	-	52.14	0.20
Passive Russell 3000	-	-	-	-	-	-	-	-
Passive S&P 500	-	-	-	-	-	-	-	-
Passive Russell Top 200	1,007.42	53.63	-	0.53	-	-	53.63	0.53
Total US Passive Equities	3,598.79	105.78	-	0.29	-	-	105.78	0.29
Total International Equities	**2,813.24**	**9,186.60**	**-**	**32.65**	**-**	**-**	**9,186.60**	**32.65**
Global Equity	343.76	1,795.73	-	52.24	-	-	1,795.73	52.24
Active Total Global Equities	**343.76**	**1,795.73**	**-**	**52.24**	**-**	**-**	**1,795.73**	**52.24**
Active Total World Ex USA:	1,337.71	3,804.36	-	28.44	-	-	3,804.36	28.44
World Ex-USA Large & Mid Developed Growth Active	661.02	1,846.34	-	27.93	-	-	1,846.34	27.93
World Ex-USA Large & Mid Developed Value Active	523.41	1,457.68	-	27.85	-	-	1,457.68	27.85
World Ex-USA Developed Small Cap Active	153.28	500.34	-	32.64	-	-	500.34	32.64
Total World Ex USA	0.00	-	-	-	-	-	-	-
NON-U.S. Activist	-	-	-	-	-	-	-	-
NON-U.S. Environmental Managers	-	-	-	-	-	-	-	-
Active Emerging Markets	908.80	4,965.93	-	54.64	-	-	4,965.93	54.64
International Fund of Funds	93.83	310.57	-	33.10	-	-	310.57	33.10
Total Active International Equities	2,340.33	9,080.86	-	38.80	-	-	9,080.86	38.80
Int'l Passive Equities:	472.91	105.73	-	2.24	-	-	105.73	2.24
World Ex-USA Small Cap Passive	95.71	29.08	-	3.04	-	-	29.08	3.04
World Ex-USA Large & Mid Cap Passive	181.56	22.44	-	1.24	-	-	22.44	1.24
Passive Global	-	-	-	-	-	-	-	-
Passive Emerging Markets	195.64	54.21	-	2.77	-	-	54.21	2.77
Total Int'l Passive Equities	472.91	105.73	-	2.24	-	-	105.73	2.24
Real Estate Equity Securities	**0.01**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Public Equities	**8,505.99**	**16,022.68**	**-**	**18.84**	**948.99**	**1.12**	**16,971.66**	**19.95**

Actual Fees Incurred

STATE STREET

FIRE RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES INCURRED FOR FISCAL YEAR ENDED JUNE 30, 2022

INVESTMENT STYLE (FIXED INCOME)	Avg. Net Asset Value FY 2022 ($MM)	Base Mgmt. Fees ($M)	Partnership Fees ($M)	Base Mgmt. Fees & Partnership Fees in BPS	Performance / Carry Fees in ($M)	Performance / Carry Fees in BPS	Total Investment Mgmt. Fees in ($M)	Total Investment Mgmt. Fees in BPS
Total Fixed Income	**6,252.97**	**5,084.86**	**-**	**8.13**	**148.81**	**0.24**	**5,233.66**	**8.37**
Structured Program:	3,827.47	1,296.53	-	3.39	148.81	0.39	1,445.34	3.78
Government Treas/Agency Sector	1,735.36	183.92	-	1.06	-	-	183.92	1.06
Long Duration Treasury	584.02	59.66	-	1.02	-	-	59.66	1.02
Mortgage Sector	799.47	485.89	-	6.08	148.81	1.86	634.70	7.94
Investment Grade Credit Sector	708.61	567.06	-	8.00	-	-	567.06	8.00
Developing Managers	84.00	159.90	-	19.04	-	-	159.90	19.04
Emerging Managers	0.00	-	-	-	-	-	-	-
TIPS:	829.84	132.52	-	1.60	-	-	132.52	1.60
Active TIPS Managers	184.52	100.27	-	5.43	-	-	100.27	5.43
Passive TIPS Managers	645.32	32.25	-	0.50	-	-	32.25	0.50
High Yield	1,099.89	3,244.70	-	29.50	-	-	3,244.70	29.50
Bank Loans	1.46	6.21	-	42.62	-	-	6.21	42.62
Convertible Bonds	-	-	-	-	-	-	-	-
ETI - Access - RBC	28.68	50.84	-	17.73	-	-	50.84	17.73
ETI - AFL-CIO HIT	61.07	194.16	-	31.79	-	-	194.16	31.79
Other ETI Programs (Internally Managed)	28.27	-	-	-	-	-	-	-
Short Term (Internally Managed & Other)	292.30	-	-	-	-	-	-	-
Total Public Markets	**14,758.96**	**21,107.53**	**-**	**14.30**	**1,097.80**	**0.74**	**22,205.33**	**15.05**
INVESTMENT STYLE (PRIVATE MARKETS)								
Hedge Funds	904.02	9,099.66	876.49	110.35	14,298.86	158.17	24,275.00	268.52
Private Equity	1,544.99	17,026.37	5,441.61	145.42	24,431.89	158.14	46,899.87	303.56
Private Real Estate	983.31	9,321.09	3,510.84	130.50	11,970.97	121.74	24,802.90	252.24
Infrastructure	236.97	3,895.86	1,048.36	208.64	(625.50)	(26.40)	4,318.72	182.25
Opportunistic Fixed Income	643.24	4,668.01	2,160.62	106.16	1,800.61	27.99	8,629.24	134.15
Total Private Markets	**4,312.53**	**44,010.98**	**13,037.91**	**132.29**	**51,876.83**	**120.29**	**108,925.73**	**252.58**
Total Overall	**19,071.49**	**65,118.52**	**13,037.91**	**40.98**	**52,974.63**	**27.78**	**131,131.05**	**68.76**

The overall carried interest and performance incentive fees paid by FIRE for the Fiscal Year: 27.78 BPS

General Footnotes:

Securities Lending Income

NYC FIRE DEPARTMENT PENSION FUND
SECURITIES LENDING INCOME
June 30, 2023

	U. S. FIXED INCOME	U. S. EQUITY	INTERNATIONAL EQUITY	TOTAL
1989	109,000	-	-	109,000
1990	104,000	-	-	104,000
1991	157,000	-	-	157,000
1992	429,000	47,000	48,000	524,000
1993	762,000	146,000	102,000	1,010,000
1994	693,000	267,000	102,000	1,062,000
1995	495,000	306,000	96,000	897,000
1996	455,000	228,000	179,000	862,000
1997	473,000	512,000	257,000	1,242,000
1998	789,000	552,000	356,000	1,697,000
1999	716,000	690,000	408,000	1,814,000
2000	734,000	897,000	408,000	2,039,000
2001	1,176,000	1,286,000	561,000	3,023,000
2002	671,000	1,162,000	506,000	2,339,000
2003	349,000	644,000	452,000	1,445,000
2004	505,000	670,000	462,000	1,637,000
2005	740,000	1,070,000	574,000	2,384,000
2006	599,000	1,753,000	713,000	3,065,000
2007	1,437,000	3,180,000	786,000	5,403,000
2008	4,172,000	6,798,000	1,236,000	12,206,000
2009	1,606,000	3,588,000	817,000	6,011,000
2010	760,000	2,047,000	563,000	3,370,000
2011	977,000	2,674,000	927,000	4,578,000
2012	1,229,000	3,324,000	832,000	5,385,000
2013	893,000	3,467,000	704,000	5,064,000
2014	756,000	2,028,000	1,739,000	4,523,000
2015	788,000	2,034,000	2,407,000	5,229,000
2016	807,000	3,245,000	2,094,000	6,146,000
2017	1,285,000	2,515,000	1,574,000	5,374,000
2018	1,100,230	2,442,001	1,489,477	5,031,708
2019	693,784	2,129,087	1,094,881	3,917,752
2020	780,299	1,002,944	638,140	2,421,383
2021	1,935,607	1,155,316	202,284	3,293,207
2022	2,925,948	1,124,007	194,829	4,244,784
2023 (6 Months)	1,510,045	700,155	118,363	2,328,564
Since Inception	33,611,913	53,683,510	22,640,974	109,936,397

STATE STREET

New York City
Fire Department Pension Fund, Subchapter Two

Appendix A

Consolidated Performance Report

Consolidated Performance Report

Through June 30, 2023

STATE STREET

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	SYSTEM RETURN SUMMARY															
5	**FIRE-TOTAL PORTFOLIO - GROSS**	18,745	100.00	2.81	8.26	7.11	(7.20)	(10.41)	13.19	14.70	8.26	7.95	7.25	8.06	8.42	07/01/1987
	FIRE - ESTIMATED INVESTMENT FEES			(0.12)	(0.50)	(0.23)	(0.44)	(0.40)	(0.50)	(0.26)	(0.50)	(0.44)	(0.36)			
	EST MANAGEMENT FEES - PUBLIC MARKET (ACCRUAL)			(0.03)	(0.10)	(0.05)	(0.11)	(0.10)	(0.12)	(0.12)	(0.10)	(0.11)	(0.12)			
	EST MANAGEMENT FEES - ALTERNATIVE MARKETS (CASH)			(0.09)	(0.40)	(0.18)	(0.33)	(0.30)	(0.38)	(0.14)	(0.40)	(0.33)	(0.24)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FIRE-TOTAL PORTFOLIO - NET MGR			2.68	7.76	6.88	(7.64)	(10.80)	12.69	14.44	7.76	7.51	6.89			
	FIRE POLICY BENCHMARK			3.25	7.19	8.23	(8.41)	(13.11)	12.52	13.78	7.19	7.01	6.69	7.65		
	EXCESS RETURN			(0.57)	0.56	(1.34)	0.77	2.31	0.18	0.65	0.56	0.50	0.19	0.41		
	EQUITY RETURN DETAIL															
26	**FIRE-TOTAL EQUITY (INCLUDES ALTERNATIVES & REITS) - GROSS**	12,387	66.08	4.37	12.12	9.24	(7.25)	(10.50)	19.71	17.50	12.12	12.86	9.66	10.53	8.58	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.17)	(0.72)	(0.33)	(0.63)	(0.56)	(0.75)	(0.34)	(0.72)	(0.64)	(0.50)			
	EST MANAGEMENT FEES			(0.17)	(0.72)	(0.33)	(0.63)	(0.56)	(0.75)	(0.34)	(0.72)	(0.64)	(0.50)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FIRE-TOTAL EQUITY (INCLUDES ALTERNATIVES & REITS) - NET MGR			4.20	11.41	8.92	(7.88)	(11.06)	18.96	17.17	11.41	12.22	9.16			
34	**FIRE-TOTAL EQUITY - GROSS**	8,132	43.38	5.95	17.86	13.85	(18.20)	(18.44)	17.02	20.21	17.86	11.44	8.58	9.89	8.25	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.05)	(0.21)	(0.11)	(0.16)	(0.15)	(0.24)	(0.22)	(0.21)	(0.21)	(0.20)			
	EST MANAGEMENT FEES			(0.05)	(0.21)	(0.11)	(0.16)	(0.15)	(0.24)	(0.22)	(0.21)	(0.21)	(0.20)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FIRE-TOTAL EQUITY - NET MGR			5.89	17.64	13.75	(18.35)	(18.59)	16.78	19.99	17.64	11.23	8.38			
42	**FIRE-TOTAL DOMESTIC EQUITY - GROSS**	5,195	27.71	7.19	18.15	14.04	(12.98)	(17.15)	25.17	19.14	18.15	13.91	10.89	12.04	12.16	08/01/1979
	ESTIMATED INVESTMENT FEES			(0.02)	(0.10)	(0.05)	(0.09)	(0.08)	(0.14)	(0.12)	(0.10)	(0.11)	(0.11)			
	FIRE-TOTAL DOMESTIC EQUITY - NET MGR			7.16	18.04	14.00	(13.07)	(17.24)	25.03	19.02	18.04	13.80	10.77			
	RUSSELL 3000 (DAILY)			8.39	18.95	16.17	(13.87)	(19.21)	25.66	20.89	18.95	13.89	11.39	12.34	11.65	
	EXCESS RETURN			(1.22)	(0.91)	(2.17)	0.80	1.97	(0.63)	(1.86)	(0.91)	(0.09)	(0.62)	(0.30)	0.51	
52	FIRE-TOTAL SMALL CAP - GROSS	295	1.57	6.24	16.19	12.01	(22.78)	(22.02)	15.34	22.75	16.19	10.09	5.30	9.54	7.36	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.18)	(0.64)	(0.33)	(0.66)	(0.65)	(0.93)	(0.72)	(0.64)	(0.82)	(0.69)			
	FIRE-TOTAL SMALL CAP - NET MGR			6.06	15.55	11.69	(23.43)	(22.67)	14.41	22.03	15.55	9.27	4.62			
	RUSSELL 2000 (DAILY)			5.21	12.31	8.09	(25.20)	(20.44)	14.82	19.96	12.31	10.82	4.21	8.26	7.66	
	EXCESS RETURN			0.86	3.24	3.60	1.77	(2.23)	(0.41)	2.07	3.24	(1.55)	0.41	1.28	(0.29)	
62	FIRE-TOTAL MID CAP - GROSS	402	2.15	4.75	15.54	10.09	(23.58)	(21.20)	10.73	26.31	15.54	8.39	5.62	9.37	8.16	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.10)	(0.43)	(0.20)	(0.31)	(0.28)	(0.74)	(1.19)	(0.43)	(0.49)	(0.70)			
	FIRE-TOTAL MID CAP - NET MGR			4.65	15.11	9.88	(23.89)	(21.48)	9.99	25.12	15.11	7.90	4.92			
	RUSSELL MIDCAP (DAILY)			4.76	14.92	9.01	(17.30)	(17.32)	22.58	17.10	14.92	12.50	8.46	10.32	9.52	
	EXCESS RETURN			(0.11)	0.19	0.87	(6.59)	(4.16)	(12.60)	8.02	0.19	(4.60)	(3.54)	(0.96)	(1.36)	

Consolidated Performance Report

Through June 30, 2023

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	EQUITY RETURN DETAIL															
74	FIRE-TOTAL RUSSELL 1000 - GROSS	3,228	17.22	6.63	17.68	12.88	(11.50)	(15.50)	26.40	17.71	17.68	14.43	11.33		11.54	04/01/2018
	ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)		(0.03)	
	FIRE-TOTAL RUSSELL 1000 - NET MGR			6.62	17.64	12.86	(11.52)	(15.53)	26.36	17.68	17.64	14.40	11.30		11.51	
	RUSSELL 1000 (DAILY)			8.58	19.36	16.68	(13.04)	(19.13)	26.45	20.96	19.36	14.09	11.92		12.07	
	EXCESS RETURN			(1.96)	(1.73)	(3.82)	1.51	3.60	(0.09)	(3.28)	(1.73)	0.30	(0.62)		(0.56)	
84	FIRE-TOTAL RUSSELL TOP 200 PASSIVE - GROSS	1,240	6.61	9.88	20.86	19.39	(11.58)	(19.85)	27.94	22.40	20.86	14.59	13.19		13.45	05/01/2018
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)		(0.01)	
	FIRE-TOTAL RUSSELL TOP 200 PASSIVE - NET MGR			9.88	20.85	19.39	(11.59)	(19.86)	27.94	22.39	20.85	14.59	13.18		13.44	
	RUSSELL TOP 200 INDEX (DAILY)			9.89	20.88	19.42	(11.46)	(19.77)	27.90	22.37	20.88	14.65	13.19		13.45	
	EXCESS RETURN			(0.01)	(0.02)	(0.03)	(0.13)	(0.09)	0.04	0.02	(0.02)	(0.06)	(0.01)		(0.01)	
94	FIRE-TOTAL FUND OF FUNDS - GROSS	30	0.16	2.97	13.76	8.52	(16.81)	(15.61)	25.78	19.88	13.76	16.68	8.02		8.92	05/01/2017
	ESTIMATED INVESTMENT FEES			(0.20)	(0.64)	(0.34)	(0.48)	(0.48)	(0.70)	(0.60)	(0.64)	(0.66)	(0.58)		(0.61)	
	FIRE-TOTAL FUND OF FUNDS - NET MGR			2.77	13.12	8.18	(17.29)	(16.10)	25.08	19.28	13.12	16.02	7.44		8.31	
	RUSSELL 2000 (DAILY)			5.21	12.31	8.09	(25.20)	(20.44)	14.82	19.96	12.31	10.82	4.21		6.38	
	EXCESS RETURN			(2.43)	0.81	0.10	7.91	4.34	10.26	(0.68)	0.81	5.19	3.23		1.93	

Consolidated Performance Report

Through June 30, 2023

STATE STREET

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	EQUITY RETURN DETAIL															
106	**FIRE-TOTAL WORLD ex-USA - GROSS**	**1,414**	**7.54**	**3.23**	**21.01**	**14.66**	**(24.87)**	**(19.76)**	**7.45**	**21.42**	**21.01**	**8.61**	**5.43**	**7.03**	**6.35**	**04/01/2004**
	ESTIMATED INVESTMENT FEES			**(0.06)**	**(0.27)**	**(0.13)**	**(0.18)**	**(0.18)**	**(0.26)**	**(0.30)**	**(0.27)**	**(0.25)**	**(0.26)**			
	FIRE-TOTAL WORLD ex-USA - NET MGR			**3.17**	**20.74**	**14.52**	**(25.05)**	**(19.95)**	**7.20**	**21.12**	**20.74**	**8.36**	**5.17**			
	WORLD EX-USA CUSTOM BM			**2.67**	**16.35**	**10.46**	**(17.73)**	**(15.26)**	**12.39**	**8.32**	**16.35**	**8.87**	**4.17**	**5.63**	**5.48**	
	EXCESS RETURN			**0.49**	**4.39**	**4.06**	**(7.32)**	**(4.69)**	**(5.20)**	**12.79**	**4.39**	**(0.51)**	**1.00**	**1.40**	**0.87**	
116	FIRE-TOTAL WORLD ex-USA LARGE & MID ACTIVE - GROSS	1,043	5.56	3.82	23.24	17.03	(26.57)	(21.00)	5.07	24.47	23.24	8.26	5.84		5.82	11/01/2013
	ESTIMATED INVESTMENT FEES			(0.07)	(0.35)	(0.16)	(0.20)	(0.22)	(0.29)	(0.36)	(0.35)	(0.30)	(0.30)		(0.29)	
	FIRE-TOTAL WORLD ex-USA LARGE & MID ACTIVE - NET MGR			3.75	22.89	16.87	(26.78)	(21.21)	4.78	24.11	22.89	7.96	5.54		5.53	
	NYC CUSTOM WORLD EX-USA LG & MID ACT INDEX			3.03	17.41	11.29	(16.76)	(14.29)	12.62	7.59	17.41	9.30	4.58		4.17	
	EXCESS RETURN			0.72	5.48	5.58	(10.02)	(6.92)	(7.84)	16.52	5.48	(1.34)	0.97		1.36	
126	FIRE-TOTAL WORLD ex-USA SMALL CAP ACTIVE - GROSS	145	0.77	0.51	15.35	8.07	(22.29)	(17.81)	19.06	19.00	15.35	11.67	5.10	8.59	7.87	05/01/2013
	ESTIMATED INVESTMENT FEES			(0.08)	(0.38)	(0.18)	(0.25)	(0.27)	(0.39)	(0.37)	(0.38)	(0.36)	(0.37)			
	FIRE-TOTAL WORLD ex-USA SMALL CAP ACTIVE - NET MGR			0.43	14.98	7.90	(22.54)	(18.08)	18.67	18.63	14.98	11.31	4.73			
	S&P EPAC SMALL CAP USD NET			0.17	10.76	6.71	(26.27)	(22.69)	8.06	13.78	10.76	5.12	0.86	5.83	5.14	
	EXCESS RETURN			0.26	4.22	1.19	3.73	4.62	10.62	4.84	4.22	6.20	3.87	**2.76**	**2.74**	
136	FIRE-TOTAL WORLD ex-USA SMALL CAP PASSIVE - GROSS	70	0.38	0.59	10.25	5.65	(22.69)	(20.23)	11.31	13.20	10.25	6.70	2.10		5.11	02/01/2014
	ESTIMATED INVESTMENT FEES			(0.01)	0.01	(0.02)	(0.02)	0.01	(0.03)	(0.04)	0.01	(0.02)	(0.02)		(0.03)	
	FIRE-TOTAL WORLD ex-USA SMALL CAP PASSIVE - NET MGR			0.58	10.26	5.63	(22.71)	(20.23)	11.27	13.16	10.26	6.68	2.08		5.09	
	WORLD EX USA SC PASSIVE CUSTOM BM			0.49	10.05	5.50	(23.02)	(20.58)	11.14	12.78	10.05	6.42	1.83		4.80	
	EXCESS RETURN			0.10	0.21	0.13	0.31	0.36	0.14	0.38	0.21	0.26	0.25		0.28	
146	FIRE-TOTAL WORLD ex-USA LARGE & MID CAP PASSIVE - GROSS	156	0.83	3.25	17.85	11.60	(16.31)	(13.85)	12.91	8.10	17.85	9.74	5.04	5.77	5.10	02/01/2011
	ESTIMATED INVESTMENT FEES			(0.00)	0.01	(0.01)	(0.01)	0.01	(0.01)	(0.01)	0.01	(0.00)	(0.01)			
	FIRE-TOTAL WORLD ex-USA LARGE & MID CAP PASSIVE - NET MGR			3.24	17.86	11.59	(16.32)	(13.84)	12.90	8.09	17.86	9.74	5.03			
	NYC CUSTOM WORLD EX US INDEX			3.03	17.41	11.29	(16.76)	(14.29)	12.62	7.59	17.41	9.30	4.58	5.43	4.75	
	EXCESS RETURN			0.21	0.45	0.30	0.43	0.45	0.28	0.50	0.45	0.44	0.45	**0.35**	**0.36**	

Consolidated Performance Report

Through June 30, 2023

STATE STREET

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	EQUITY RETURN DETAIL															
158	**FIRE-TOTAL EMERGING MARKETS - GROSS**	**991**	**5.29**	**3.50**	**8.41**	**9.36**	**(27.48)**	**(20.12)**	**(2.06)**	**17.40**	**8.41**	**4.86**	**1.79**	**3.89**	**6.08**	**09/01/1996**
	ESTIMATED INVESTMENT FEES			**(0.12)**	**(0.50)**	**(0.25)**	**(0.32)**	**(0.36)**	**(0.44)**	**(0.42)**	**(0.50)**	**(0.46)**	**(0.39)**			
	FIRE-TOTAL EMERGING MARKETS - NET MGR			**3.38**	**7.91**	**9.11**	**(27.81)**	**(20.47)**	**(2.50)**	**16.98**	**7.91**	**4.40**	**1.40**			
	MSCI EMERGING MARKETS			**0.90**	**1.75**	**4.89**	**(25.28)**	**(20.09)**	**(2.54)**	**18.31**	**1.75**	**2.32**	**0.93**	**2.95**		
	EXCESS RETURN			**2.48**	**6.16**	**4.22**	**(2.52)**	**(0.38)**	**0.04**	**(1.33)**	**6.16**	**2.08**	**0.47**	**0.94**		
168	FIRE-TOTAL ACTIVE EMERGING MARKETS - GROSS	820	4.37	4.06	9.81	10.29	(28.06)	(20.24)	(2.02)	16.62	9.81	5.38	1.81	4.13	7.30	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.14)	(0.61)	(0.30)	(0.39)	(0.43)	(0.53)	(0.58)	(0.61)	(0.57)	(0.50)			
	FIRE-TOTAL ACTIVE EMERGING MARKETS - NET MGR			3.92	9.21	9.99	(28.45)	(20.68)	(2.55)	16.04	9.21	4.81	1.31			
	MSCI EMERGING MARKETS			0.90	1.75	4.89	(25.28)	(20.09)	(2.54)	18.31	1.75	2.32	0.93	2.95	6.34	
	EXCESS RETURN			**3.02**	**7.46**	**5.10**	**(3.16)**	**(0.58)**	**(0.01)**	**(2.26)**	**7.46**	**2.49**	**0.38**	**1.18**	**0.95**	
178	FIRE-TOTAL PASSIVE EMERGING MARKETS - GROSS	172	0.92	0.87	2.17	5.11	(24.78)	(19.54)	(2.08)	17.29	2.17	2.64	1.09	3.10	1.20	04/01/2011
	ESTIMATED INVESTMENT FEES			(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)			
	FIRE-TOTAL PASSIVE EMERGING MARKETS - NET MGR			0.86	2.14	5.10	(24.79)	(19.54)	(2.10)	17.27	2.14	2.62	1.07			
	MSCI EMERGING MARKETS			0.90	1.75	4.89	(25.28)	(20.09)	(2.54)	18.31	1.75	2.32	0.93	2.95	1.10	
	EXCESS RETURN			**(0.03)**	**0.39**	**0.21**	**0.49**	**0.55**	**0.44**	**(1.04)**	**0.39**	**0.30**	**0.14**	**0.15**	**0.10**	
188	**FIRE-TOTAL INTERNATIONAL FUND OF FUNDS - GROSS**	**133**	**0.71**	**3.11**	**15.51**	**10.86**	**(20.54)**	**(16.71)**	**9.53**	**17.02**	**15.51**	**8.91**	**4.95**		**5.99**	**05/01/2017**
	ESTIMATED INVESTMENT FEES			**(0.23)**	**(0.54)**	**(0.33)**	**(0.26)**	**(0.28)**	**(0.53)**	**(0.41)**	**(0.54)**	**(0.47)**	**(0.41)**		**(0.41)**	
	FIRE-TOTAL INTERNATIONAL FUND OF FUNDS - NET MGR			**2.89**	**14.97**	**10.53**	**(20.80)**	**(16.98)**	**9.00**	**16.62**	**14.97**	**8.44**	**4.54**		**5.58**	
	MSCI ACWI EX USA IMI NET			**2.38**	**12.47**	**9.10**	**(19.86)**	**(16.58)**	**8.53**	**11.12**	**12.47**	**7.33**	**3.38**		**4.57**	
	EXCESS RETURN			**0.50**	**2.50**	**1.42**	**(0.94)**	**(0.40)**	**0.47**	**5.50**	**2.50**	**1.11**	**1.16**		**1.02**	
198	**FIRE-TOTAL GLOBAL EQUITY - GROSS**	**399**	**2.13**	**7.11**	**25.25**	**20.24**	**(29.92)**	**(29.06)**	**12.73**	**39.76**	**25.25**	**7.92**	**9.99**		**9.63**	**06/01/2018**
	ESTIMATED INVESTMENT FEES			**(0.14)**	**(0.64)**	**(0.31)**	**(0.37)**	**(0.36)**	**(0.60)**	**(0.77)**	**(0.64)**	**(0.57)**	**(0.59)**		**(0.59)**	
	FIRE-TOTAL GLOBAL EQUITY - NET MGR			**6.98**	**24.61**	**19.93**	**(30.29)**	**(29.43)**	**12.13**	**39.00**	**24.61**	**7.35**	**9.40**		**9.05**	
	MSCI AC WORLD (DAILY CONST)			**6.18**	**16.53**	**13.93**	**(15.75)**	**(18.36)**	**18.54**	**16.25**	**16.53**	**10.99**	**8.10**		**7.85**	
	EXCESS RETURN			**0.80**	**8.08**	**6.00**	**(14.54)**	**(11.06)**	**(6.41)**	**22.74**	**8.08**	**(3.63)**	**1.89**		**1.20**	

Consolidated Performance Report

Through June 30, 2023

STATE STREET

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	ALTERNATIVE EQUITY RETURN DETAIL															
216	**FIRE-TOTAL HEDGE FUNDS* - NET MGR**	**951**	**5.08**	**2.32**	**2.71**	**0.79**	**(0.19)**	**(0.26)**	**5.78**	**17.52**	**2.71**	**5.24**	**5.47**	**5.03**	**4.66**	**07/01/2011**
	HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			**1.78**	**4.72**	**2.80**	**(4.55)**	**(4.36)**	**7.23**	**11.98**	**4.72**	**6.09**	**4.35**	**4.43**	**4.05**	
	EXCESS RETURN			**0.54**	**(2.01)**	**(2.00)**	**4.36**	**4.10**	**(1.46)**	**5.54**	**(2.01)**	**(0.85)**	**1.12**	**0.61**	**0.61**	
226	FIRE-TOTAL DIRECT HEDGE FUNDS* - NET MGR	951	5.08	2.32	2.71	0.79	(0.19)	(0.26)	5.78	17.53	2.71	5.24	5.47	5.16	5.34	01/01/2012
	HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			1.78	4.72	2.80	(4.55)	(4.36)	7.23	11.98	4.72	6.09	4.35	4.43	4.70	
	EXCESS RETURN			0.54	(2.01)	(2.00)	4.36	4.10	(1.46)	5.55	(2.01)	(0.85)	1.12	0.74	0.65	
236	FIRE-TOTAL PERMAL HEDGE FUNDS OF FUNDS* - NET MGR															
	HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			1.78	4.72	2.80	(4.55)	(4.36)	7.23	11.98	4.72	6.09	4.35	4.43	4.05	
	EXCESS RETURN															

* INFORMATION PROVIDED BY ALPHA FRONTIER

Consolidated Performance Report

Through June 30, 2023

STATE STREET

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	ALTERNATIVE EQUITY RETURN DETAIL															
244	FIRE-TOTAL REAL ESTATE SECURITIES - GROSS	0	0.00													01/01/2003
	ESTIMATED INVESTMENT FEES															
	FIRE-TOTAL REAL ESTATE SECURITIES - NET MGR															
	DJ US SELECT REAL ESTATE SECURITIES INDEX						(6.41)		45.91	(11.20)						
	EXCESS RETURN															
254	FIRE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - GROSS	1,746	9.31	2.92	2.08	3.86	30.33	5.52	49.48	16.75	2.08	26.36	18.77	17.15	14.91	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.61)	(2.27)	(1.14)	(3.70)	(2.08)	(4.58)	(1.12)	(2.27)	(2.84)	(2.06)			
	FIRE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			2.31	(0.19)	2.72	26.63	3.44	44.90	15.63	(0.19)	23.53	16.71			
	NYC R3000 +3% LAGGED			7.96	(5.81)	16.55	15.25	(15.11)	35.74	18.42	(5.81)	21.99	13.74	14.97	13.27	
	EXCESS RETURN			(5.65)	5.62	(13.83)	11.38	18.55	9.16	(2.79)	5.62	1.54	2.97	2.18	1.64	
264	FIRE-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) - GROSS	1,180	6.30	(1.63)	(0.66)	(3.77)	36.11	21.54	24.87	1.16	(0.66)	14.21	10.72	12.11	8.99	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.22)	(1.11)	(0.45)	(2.48)	(1.91)	(1.73)	(0.55)	(1.11)	(1.43)	(1.07)			
	FIRE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			(1.85)	(1.77)	(4.22)	33.62	19.62	23.14	0.61	(1.77)	12.78	9.65			
	NCREIF NFI-ODCE NET + 100 BP			(2.64)	(9.83)	(5.69)	29.57	7.61	22.21	1.35	(9.83)	8.11	6.61	8.84		
	EXCESS RETURN			0.78	8.06	1.47	4.06	12.02	0.93	(0.73)	8.06	4.67	3.04	3.26		
274	FIRE-TOTAL INFRASTRUCTURE (TIME WEIGHTED) - GROSS	375	2.00	3.47	11.72	7.60	18.53	14.42	17.67	9.64	11.72	16.78	14.22		15.35	12/01/2013
	ESTIMATED INVESTMENT FEES			(0.90)	(3.54)	(1.28)	(3.07)	(3.55)	(2.88)	(1.47)	(3.54)	(2.84)	(2.35)		(3.02)	
	FIRE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			2.57	8.18	6.32	15.47	10.87	14.79	8.17	8.18	13.93	11.86		12.33	
	CPI + 4%			1.67	7.22	3.63	13.29	10.70	11.48	5.37	7.22	9.97	8.05		6.87	
	EXCESS RETURN			0.91	0.96	2.68	2.18	0.17	3.31	2.79	0.96	3.96	3.81		5.46	

Consolidated Performance Report

Through June 30, 2023

STATE STREET

#		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	FIXED INCOME RETURN DETAIL															
286	**FIRE-TOTAL FIXED INCOME - GROSS**	**6,358**	**33.92**	**(0.14)**	**1.25**	**3.12**	**(7.26)**	**(10.46)**	**1.86**	**9.35**	**1.25**	**(0.84)**	**2.65**	**3.11**	**7.41**	**02/01/1980**
	ESTIMATED INVESTMENT FEES			**(0.03)**	**(0.13)**	**(0.07)**	**(0.09)**	**(0.09)**	**(0.10)**	**(0.13)**	**(0.13)**	**(0.11)**	**(0.12)**			
	EST MANAGEMENT FEES			**(0.03)**	**(0.13)**	**(0.07)**	**(0.09)**	**(0.09)**	**(0.10)**	**(0.13)**	**(0.13)**	**(0.11)**	**(0.12)**			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FIRE-TOTAL FIXED INCOME - NET MGR			**(0.17)**	**1.12**	**3.06**	**(7.35)**	**(10.55)**	**1.75**	**9.23**	**1.12**	**(0.95)**	**2.53**			
294	**FIRE-TOTAL FIXED INCOME (ex OFI & CASH) - GROSS**	**5,440**		**(0.43)**	**0.73**	**2.93**	**(9.33)**	**(12.24)**	**0.25**	**10.29**	**0.73**	**(2.20)**	**2.14**		**2.61**	**11/01/2013**
	ESTIMATED INVESTMENT FEES			**(0.02)**	**(0.09)**	**(0.05)**	**(0.08)**	**(0.07)**	**(0.09)**	**(0.13)**	**(0.09)**	**(0.09)**	**(0.11)**		**(0.13)**	
	EST MANAGEMENT FEES			**(0.02)**	**(0.09)**	**(0.05)**	**(0.08)**	**(0.07)**	**(0.09)**	**(0.13)**	**(0.09)**	**(0.09)**	**(0.11)**		**(0.13)**	
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FIRE-TOTAL FIXED INCOME (ex OFI & CASH) - NET MGR			**(0.46)**	**0.64**	**2.89**	**(9.41)**	**(12.31)**	**0.16**	**10.16**	**0.64**	**(2.29)**	**2.03**		**2.48**	
302	**FIRE-TOTAL STRUCTURED FIXED INCOME - GROSS**	**3,446**	**18.38**	**(0.88)**	**(1.23)**	**2.30**	**(9.60)**	**(12.99)**	**(2.62)**	**12.81**	**(1.23)**	**(4.55)**	**1.99**	**2.53**	**6.83**	**01/01/1985**
	ESTIMATED INVESTMENT FEES			**(0.01)**	**(0.03)**	**(0.02)**	**(0.03)**	**(0.03)**	**(0.03)**	**(0.05)**	**(0.03)**	**(0.03)**	**(0.04)**			
	FIRE-TOTAL STRUCTURED FIXED INCOME - NET MGR			**(0.89)**	**(1.26)**	**2.29**	**(9.63)**	**(13.02)**	**(2.65)**	**12.76**	**(1.26)**	**(4.58)**	**1.95**			
	NYC CUSTOM STRUCTURED INDEX-FIRE			**(0.92)**	**(1.36)**	**2.25**	**(9.73)**	**(13.18)**	**(2.51)**	**14.74**	**(1.36)**	**(4.68)**	**2.62**	**2.89**		
	EXCESS RETURN			**0.03**	**0.11**	**0.04**	**0.10**	**0.16**	**(0.14)**	**(1.98)**	**0.11**	**0.10**	**(0.67)**	**(0.36)**		
312	FIRE-TOTAL GOVERNMENT - GROSS	2,025	10.80	(1.26)	(2.13)	1.98	(8.39)	(12.53)	(3.94)	13.77	(2.13)	(5.60)	1.94	2.19	6.29	01/01/1987
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)			
	FIRE-TOTAL GOVERNMENT - NET MGR			(1.26)	(2.14)	1.97	(8.40)	(12.54)	(3.96)	13.75	(2.14)	(5.62)	1.92			
	CUSTOM GOVERNMENT BENCHMARK - FIRE			(1.25)	(2.28)	2.08	(8.52)	(12.91)	(3.70)	19.35	(2.28)	(5.51)	3.48	3.40		
	EXCESS RETURN			**(0.01)**	**0.14**	**(0.11)**	**0.12**	**0.37**	**(0.25)**	**(5.60)**	**0.14**	**(0.10)**	**(1.56)**	**(1.20)**		
322	FIRE-TOTAL MORTGAGE - GROSS	748	3.99	(0.54)	(1.29)	2.12	(8.81)	(11.66)	(0.85)	4.62	(1.29)	(3.40)	0.38	1.38	5.58	03/01/1987
	ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.02)	(0.05)	(0.04)	(0.05)	(0.06)	(0.04)	(0.05)	(0.05)			
	FIRE-TOTAL MORTGAGE - NET MGR			(0.55)	(1.34)	2.09	(8.86)	(11.69)	(0.90)	4.56	(1.34)	(3.45)	0.33			
	NYC CUSTOM MORTGAGE BENCHMARK			(0.64)	(1.52)	1.87	(9.03)	(11.81)	(1.04)	3.91	(1.52)	(3.75)	0.10	1.16	5.26	
	EXCESS RETURN			**0.09**	**0.18**	**0.23**	**0.17**	**0.12**	**0.14**	**0.65**	**0.18**	**0.31**	**0.23**	**0.22**	**0.32**	
332	FIRE-TOTAL INVESTMENT GRADE CORPORATE - GROSS	673	3.59	(0.12)	1.77	3.53	(14.41)	(16.08)	(0.87)	9.99	1.77	(3.33)	1.80	2.81	6.22	01/01/1987
	ESTIMATED INVESTMENT FEES			(0.02)	(0.09)	(0.05)	(0.07)	(0.06)	(0.09)	(0.09)	(0.09)	(0.08)	(0.09)			
	FIRE-TOTAL INVESTMENT GRADE CORPORATE - NET MGR			(0.14)	1.68	3.49	(14.48)	(16.14)	(0.96)	9.90	1.68	(3.41)	1.71			
	NYC CUSTOM IGC BENCHMARK			(0.29)	1.55	3.21	(14.19)	(15.76)	(0.85)	9.70	1.55	(3.43)	1.62	2.45		
	EXCESS RETURN			**0.15**	**0.13**	**0.28**	**(0.29)**	**(0.38)**	**(0.11)**	**0.20**	**0.13**	**0.03**	**0.10**	**0.37**		
342	FIRE-TOTAL CORE FI- DEVELOPING MGRS - GROSS	78	0.41	(0.46)	0.68	2.86	(10.79)	(12.73)	(0.92)	8.37	0.68	(2.91)	1.37	2.11	3.44	05/01/2009
	ESTIMATED INVESTMENT FEES			(0.05)	(0.19)	(0.10)	(0.17)	(0.17)	(0.19)	(0.20)	(0.19)	(0.19)	(0.19)			
	FIRE-TOTAL CORE FI- DEVELOPING MGRS - NET MGR			(0.51)	0.49	2.76	(10.96)	(12.89)	(1.11)	8.16	0.49	(3.10)	1.18			
	BLOOMBERG U.S. AGGREGATE			(0.84)	(0.94)	2.09	(10.29)	(13.01)	(1.54)	7.51	(0.94)	(3.96)	0.77	1.52	2.56	
	EXCESS RETURN			**0.34**	**1.42**	**0.67**	**(0.67)**	**0.12**	**0.43**	**0.66**	**1.42**	**0.87**	**0.41**	**0.60**	**0.88**	

Consolidated Performance Report

Through June 30, 2023

STATE STREET

		Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	FYE 2022	CYE 2022	CYE 2021	CYE 2020	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
	FIXED INCOME RETURN DETAIL															
364	FIRE-TOTAL TIPS - GROSS	727	3.88	(1.45)	(1.44)	1.97	(5.11)	(11.89)	5.87	11.03	(1.44)	(0.15)	2.49	2.12	3.41	06/01/2005
	ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)			
	FIRE-TOTAL TIPS - NET MGR			(1.45)	(1.45)	1.96	(5.13)	(11.91)	5.85	11.01	(1.45)	(0.16)	2.47			
	BLOOMBERG GLOBAL INFL-LINKED: U.S. TIPS			(1.42)	(1.40)	1.87	(5.14)	(11.85)	5.96	10.99	(1.40)	(0.12)	2.49	2.08	3.31	
	EXCESS RETURN			(0.03)	(0.05)	0.09	0.01	(0.06)	(0.10)	0.02	(0.05)	(0.04)	(0.02)	0.03	0.10	
384	FIRE-TOTAL TARGETED INVESTMENTS (NO CASH) - GROSS	108	0.58	(1.09)	(0.86)	2.13	(9.05)	(11.79)	(0.76)	7.10	(0.86)	(3.17)	1.34	2.18	6.42	12/01/1984
	ESTIMATED INVESTMENT FEES			(0.05)	(0.21)	(0.11)	(0.19)	(0.19)	(0.20)	(0.22)	(0.21)	(0.20)	(0.22)	(0.27)	(0.18)	
	FIRE-TOTAL TARGETED INVESTMENTS (NO CASH) - NET MGR			(1.14)	(1.07)	2.03	(9.24)	(11.98)	(0.97)	6.87	(1.07)	(3.37)	1.12	1.91	6.24	
	FIRE CUSTOM BENCHMARK (NO CASH)			(0.63)	(0.71)	2.03	(8.98)	(11.40)	(1.15)	6.18	(0.71)	(3.38)	0.82	1.57		
	EXCESS RETURN			(0.50)	(0.36)	(0.01)	(0.26)	(0.58)	0.19	0.69	(0.36)	0.00	0.30	0.34		
394	**FIRE-TOTAL HIGH YIELD - GROSS**	**1,081**	**5.77**	**1.82**	**9.40**	**5.76**	**(11.36)**	**(9.99)**	**6.19**	**7.53**	**9.40**	**4.00**	**4.02**	**4.66**	**7.35**	**12/01/1994**
	ESTIMATED INVESTMENT FEES			**(0.08)**	**(0.34)**	**(0.16)**	**(0.26)**	**(0.26)**	**(0.33)**	**(0.35)**	**(0.34)**	**(0.32)**	**(0.32)**			
	FIRE-TOTAL HIGH YIELD - NET MGR			**1.74**	**9.06**	**5.60**	**(11.62)**	**(10.25)**	**5.86**	**7.18**	**9.06**	**3.68**	**3.70**			
	HIGH YIELD CUSTOM BENCHMARK			**1.75**	**9.07**	**5.38**	**(12.82)**	**(11.18)**	**5.26**	**7.05**	**9.07**	**3.12**	**3.34**	**4.20**	**6.32**	
	EXCESS RETURN			**(0.01)**	**(0.01)**	**0.22**	**1.21**	**0.93**	**0.60**	**0.13**	**(0.01)**	**0.56**	**0.36**	**0.46**	**1.03**	
404	**FIRE- TOTAL BANK LOANS - GROSS**	**1**	**0.01**							**0.55**						**12/01/2012**
	ESTIMATED INVESTMENT FEES									**(0.36)**						
	FIRE-TOTAL BANK LOANS - NET MGR									**0.19**						
	CSFB LEVERAGED LOAN INDEX						**(2.68)**	**(1.06)**	**5.40**	**2.78**						
	EXCESS RETURN									**(2.59)**						
414	**FIRE-TOTAL OPPORTUNISTIC FIXED INCOME - GROSS**	**741**	**3.95**	**1.71**	**4.42**	**4.73**	**7.72**	**0.80**	**18.17**	**5.52**	**4.42**	**11.15**	**7.37**	**6.98**	**8.23**	**11/01/2007**
	ESTIMATED INVESTMENT FEES			**(0.08)**	**(0.47)**	**(0.25)**	**(0.24)**	**(0.31)**	**(0.29)**	**(0.16)**	**(0.47)**	**(0.32)**	**(0.25)**			
	FIRE-TOTAL OPPORTUNISTIC FIXED INCOME - NET MGR			**1.63**	**3.95**	**4.49**	**7.48**	**0.49**	**17.87**	**5.36**	**3.95**	**10.83**	**7.11**			
	OPPORTUNISTIC FIXED INCOME JPMGHY / CSFB 50/50 BLEND PLUS 300			**3.22**	**13.02**	**7.42**	**(4.95)**	**(2.79)**	**8.29**	**7.22**	**13.02**	**8.03**	**6.80**	**7.45**	**8.38**	
	EXCESS RETURN			**(1.58)**	**(9.08)**	**(2.93)**	**12.43**	**3.27**	**9.58**	**(1.86)**	**(9.08)**	**2.80**	**0.31**	**(0.47)**	**(0.15)**	
	CASH SUMMARY															
426	Short Term FIRE - GROSS	177	0.94	1.26	3.82	2.39	0.03	1.42	0.07	0.45	3.82	1.31	1.53	1.12	3.27	12/01/1989
	ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	Short Term FIRE - NET MGR			1.26	3.82	2.39	0.03	1.42	0.07	0.45	3.82	1.31	1.53	1.12		
430	Cash Account	0	0.00													
432	Securities Lending	0	0.00													

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

STATE STREET

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
EQUITY SUMMARY										
US EQUITY										
PanAgora-US SCC	$63	0.33	4.67	15.64	7.67	(17.77)	20.51			
RUSSELL 2000 (DAILY)			5.21	12.31	8.09	(20.44)	14.82			
Excess			(0.53)	3.33	(0.42)	2.67	5.69			
BlackRock US SCG R2000	$0	0.00	7.01	18.46	13.50	(26.38)	3.35	34.42	28.39	(9.14)
RUSSELL 2000 GROWTH DAILY			7.05	18.53	13.55	(26.36)	2.83	34.63	28.48	(9.31)
Excess			(0.04)	(0.07)	(0.05)	(0.02)	0.51	(0.21)	(0.09)	0.17
BlackRock US SCV R2000	$0	0.00	3.14	6.06	2.58	(14.51)	28.48	4.88	22.60	(12.79)
RUSSELL 2000 VALUE DAILY			3.18	6.01	2.50	(14.48)	28.27	4.63	22.39	(12.86)
Excess			(0.05)	0.05	0.08	(0.03)	0.21	0.24	0.20	0.08
Brown-US SCG	$59	0.31	7.47	11.29	17.65	(37.49)	(4.51)	45.05	29.45	1.06
RUSSELL 2000 GROWTH DAILY			7.05	18.53	13.55	(26.36)	2.83	34.63	28.48	(9.31)
Excess			0.42	(7.24)	4.10	(11.13)	(7.35)	10.42	0.97	10.37
Wasatch-US SCG	$53	0.28	6.72	17.54	16.24	(31.07)	19.71	39.15		
RUSSELL 2000 GROWTH DAILY			7.05	18.53	13.55	(26.36)	2.83	34.63		
Excess			(0.34)	(0.99)	2.68	(4.71)	16.87	4.52		
Cooke and Bieler-US SCV	$62	0.33	7.35	16.09	11.48	(17.99)	18.01	9.23		
RUSSELL 2000 VALUE DAILY			3.18	6.01	2.50	(14.48)	28.27	4.63		
Excess			4.16	10.08	8.97	(3.50)	(10.26)	4.60		
Pzena-US SCV	$59	0.31	4.28	17.70	6.97	(6.26)	29.51	0.68		
RUSSELL 2000 VALUE DAILY			3.18	6.01	2.50	(14.48)	28.27	4.63		
Excess			1.10	11.70	4.46	8.23	1.24	(3.95)		

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
Cooke and Bieler-US MCV	$64	0.34	5.97	12.91	10.33					
RUSSELL MIDCAP VALUE (DAILY)			3.86	10.50	5.23					
Excess			2.11	2.41	5.10					
Victory-US MCV	$67	0.36	2.20	13.72	4.01					
RUSSELL MIDCAP VALUE (DAILY)			3.86	10.50	5.23					
Excess			(1.66)	3.22	(1.23)					
Westfield-US MCG	$122	0.65	8.31	21.75	17.58					
RUSSELL MIDCAP GROWTH (DAILY)			6.23	23.13	15.94					
Excess			2.08	(1.38)	1.64					
Wellington US MCC	$149	0.79	2.37	11.67	6.69	(23.32)	9.99	25.11	32.69	(7.35)
S&P 400 MIDCAP INDEX (DAILY)			4.85	17.61	8.84	(13.06)	24.76	13.66	26.20	(11.08)
Excess			(2.48)	(5.94)	(2.15)	(10.26)	(14.77)	11.45	6.49	3.74
BlackRock US LMC R1000 Core	$2,144	11.44	8.57	19.39	16.67	(19.06)	26.78	21.32	31.40	
RUSSELL 1000 (DAILY)			8.58	19.36	16.68	(19.13)	26.45	20.96	31.43	
Excess			(0.01)	0.02	(0.01)	0.07	0.33	0.36	(0.02)	
PIMCO RAFI US LMCE	$563	3.00	2.17	16.06	4.77	(3.07)	28.08	4.47	25.39	(6.74)
RUSSELL 1000 (DAILY)			8.58	19.36	16.68	(19.13)	26.45	20.96	31.43	(4.78)
Excess			(6.41)	(3.30)	(11.91)	16.06	1.63	(16.49)	(6.03)	(1.96)
Legal General US LMCE	$521	2.78	3.57	12.41	6.78	(12.10)	22.90	9.61		
RUSSELL 1000 (DAILY)			8.58	19.36	16.68	(19.13)	26.45	20.96		
Excess			(5.01)	(6.95)	(9.90)	7.02	(3.55)	(11.36)		
SSGA-US LC Russell TOP 200 Core	$1,240	6.61	9.88	20.85	19.39	(19.86)	27.94	22.39	31.77	
RUSSELL TOP 200 INDEX (DAILY)			9.89	20.88	19.42	(19.77)	27.90	22.37	31.75	
Excess			(0.01)	(0.02)	(0.03)	(0.09)	0.04	0.02	0.02	

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
FUND OF FUNDS										
FIRE-TOTAL FUND OF FUNDS	$30	0.16	2.77	13.12	8.18	(16.10)	25.08	19.28	23.33	(8.21)
RUSSELL 2000 (DAILY)			5.21	12.31	8.09	(20.44)	14.82	19.96	25.52	(11.01)
Excess			(2.43)	0.81	0.10	4.34	10.26	(0.68)	(2.20)	2.80
FIRE-TOTAL LEGATO	$30	0.16	2.77	13.12	8.18	(16.10)	25.08	19.28	23.33	(8.19)
RUSSELL 2000 (DAILY)			5.21	12.31	8.09	(20.44)	14.82	19.96	25.52	(11.01)
Excess			(2.43)	0.81	0.10	4.34	10.26	(0.68)	(2.20)	2.82
NON - US EQUITY										
Baillie Gifford WorldxUS LMCC	$253	1.35	1.92	17.83	16.16	(38.19)	(7.62)	66.93	37.00	(15.37)
NYC Developed Growth Benchmark [1]			3.03	17.41	11.29	(14.29)	12.62	7.59	22.49	(14.09)
Excess			(1.12)	0.42	4.87	(23.90)	(20.25)	59.34	14.50	(1.28)
Walter Scott WorldxUS LMCC	$271	1.45	3.72	22.47	17.48	(22.40)	12.82	17.99	28.51	(7.65)
NYC Developed Growth Benchmark [1]			3.03	17.41	11.29	(14.29)	12.62	7.59	22.49	(14.09)
Excess			0.69	5.05	6.19	(8.11)	0.19	10.41	6.02	6.44
Causeway WorldxUS LMCV	$252	1.35	5.12	30.88	20.55	(6.95)	9.75	6.48	21.35	(18.34)
NYC Developed Value Benchmark [2]			3.03	17.41	11.29	(14.29)	12.62	7.59	22.49	(14.09)
Excess			2.09	13.47	9.26	7.34	(2.88)	(1.10)	(1.14)	(4.25)
Sprucegrove WorldxUS LMCC	$265	1.41	4.00	20.72	13.36	(11.55)	8.11	4.85	17.62	(13.67)
NYC Developed Value Benchmark [2]			3.03	17.41	11.29	(14.29)	12.62	7.59	22.49	(14.09)
Excess			0.97	3.30	2.07	2.74	(4.51)	(2.74)	(4.87)	0.42
Acadian WorldxUS SCC	$124	0.66	0.61	15.54	8.37	(17.43)	20.14	15.89	21.82	(19.22)
S&P EPAC Small Cap USD NET			0.17	10.76	6.71	(22.69)	8.06	13.78	23.71	(18.58)
Excess			0.44	4.78	1.66	5.27	12.08	2.11	(1.89)	(0.65)
Fidelity WorldxUS SCC	$0	0.00								(18.22)
S&P EPAC Small Cap USD NET										(18.58)
Excess										0.36

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

STATE STREET

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
Algert EAFE SCC	$21	0.11	(0.62)	11.86	5.25	(21.67)	11.80	9.70		
MSCI EAFE SMALL CAP NET (DAILY)			0.58	10.18	5.53	(21.39)	10.10	12.34		
Excess			(1.20)	1.69	(0.28)	(0.28)	1.70	(2.64)		
SSGA WorldxUS LMC NYC Custom IDX	$156	0.83	3.24	17.86	11.59	(13.84)	12.90	8.09	22.75	(13.64)
NYC Custom World ex US Index [3]			3.03	17.41	11.29	(14.29)	12.62	7.59	22.49	(14.09)
Excess			0.21	0.45	0.30	0.45	0.28	0.50	0.26	0.45
SSGA WorldxUS SC Custom IDX [4]	$70	0.38	0.58	10.26	5.63	(20.23)	11.27	13.16	25.67	(17.97)
World ex USA SC PASSIVE CUSTOM BM [5]			0.49	10.05	5.50	(20.58)	11.14	12.78	25.41	(18.07)
Excess			0.10	0.21	0.13	0.36	0.14	0.38	0.26	0.10
EMERGING MARKETS										
Baillie Gifford EM	$169	0.90	3.17	8.37	10.59	(27.56)	(9.04)	29.60	28.50	(15.37)
MSCI EMERGING MARKETS			0.90	1.75	4.89	(20.09)	(2.54)	18.31	18.42	(14.57)
Excess			2.27	6.62	5.70	(7.47)	(6.49)	11.29	10.08	(0.80)
Acadian EM	$149	0.80	3.30	5.89	9.17	(19.23)	4.32	10.72	15.71	(17.27)
MSCI EMERGING MARKETS			0.90	1.75	4.89	(20.09)	(2.54)	18.31	18.42	(14.57)
Excess			2.40	4.14	4.28	0.86	6.87	(7.59)	(2.71)	(2.70)
Parametric EM	$0	0.00							14.20	(14.33)
MSCI EMERGING MARKETS									18.42	(14.57)
Excess									(4.22)	0.24
Pzena-EM ACV	$281	1.50	6.17	16.81	13.36	(6.95)	6.55			
MSCI EMERGING MARKETS			0.90	1.75	4.89	(20.09)	(2.54)			
Excess			5.27	15.06	8.47	13.14	9.09			
Sands-EM LCG	$101	0.54	3.67	7.43	9.87	(33.94)	(8.61)			
MSCI EMERGING MARKETS			0.90	1.75	4.89	(20.09)	(2.54)			
Excess			2.77	5.68	4.98	(13.85)	(6.06)			

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
UBS-EM ACC	$119	0.63	0.93	0.29	3.06	(24.64)	(8.59)			
MSCI EMERGING MARKETS			0.90	1.75	4.89	(20.09)	(2.54)			
Excess			0.03	(1.46)	(1.82)	(4.55)	(6.05)			
BlackRock MSCI EM Core	$172	0.92	0.86	2.10	5.10	(19.57)	(2.10)	17.27	18.76	(14.43)
MSCI EMERGING MARKETS			0.90	1.75	4.89	(20.09)	(2.54)	18.31	18.42	(14.57)
Excess			(0.03)	0.36	0.21	0.52	0.44	(1.04)	0.34	0.14
INTERNATIONAL FOF										
FIRE-TOTAL INTERNATIONAL FOF	$133	0.71	2.89	14.97	10.53	(16.98)	9.00	16.62	22.15	(14.65)
MSCI ACWI ex USA IMI Net			2.38	12.47	9.10	(16.58)	8.53	11.12	21.63	(14.76)
Excess			0.50	2.50	1.42	(0.40)	0.47	5.50	0.52	0.10
FIRE-TOTAL INTERNATIONAL XPONANCE	$133	0.71	2.89	14.97	10.53	(16.98)	9.00	16.62	22.15	(14.65)
MSCI ACWI ex USA IMI Net			2.38	12.47	9.10	(16.58)	8.53	11.12	21.63	(14.76)
Excess			0.50	2.50	1.42	(0.40)	0.47	5.50	0.52	0.10
GLOBAL EQUITY										
Fiera-Global	$175	0.93	5.55	20.00	14.11	(18.26)	26.27	20.63	34.02	
MSCI World Index			6.83	18.51	15.09	(18.14)	21.82	15.90	27.67	
Excess			(1.28)	1.49	(0.98)	(0.12)	4.45	4.72	6.35	
Nordea-Global MCG	$77	0.41	1.99	14.35	9.56					
MSCI World Index			6.83	18.51	15.09					
Excess			(4.84)	(4.16)	(5.53)					
Morgan Stanley-Global	$148	0.79	11.59	37.22	34.68	(40.29)	0.63	58.64	38.01	
MSCI AC WORLD (Daily Const)			6.18	16.53	13.93	(18.36)	18.54	16.25	26.60	
Excess			5.41	20.69	20.75	(21.93)	(17.91)	42.39	11.41	

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
REAL ESTATE SECURITIES										
Morgan Stanley REITS	$0	0.00							19.02	(7.88)
Morgan Stanley Custom RESI Index									23.10	(4.22)
Excess									(4.08)	(3.66)
FIXED INCOME SUMMARY										
STRUCTURED FIXED INCOME										
T Rowe Price-Corporate	$251	1.34	(0.26)	1.72	3.72	(16.42)	(0.72)	9.60	14.52	(2.41)
NYC Custom IGC Benchmark [6]			(0.29)	1.55	3.21	(15.76)	(0.85)	9.70	13.40	(1.90)
Excess			0.03	0.18	0.51	(0.65)	0.12	(0.10)	1.12	(0.51)
Neuberger Berman-Corporate	$275	1.47	(0.02)	2.12	3.62	(16.14)				
Bloomberg U.S. Corporate Inv Grade			(0.29)	1.55	3.21	(15.76)				
Excess			0.26	0.57	0.42	(0.38)				
Pinebridge-Corporate	$147	0.78	(0.16)	0.82	2.84	(15.68)				
NYC Custom IGC Benchmark [6]			(0.29)	1.55	3.21	(15.76)				
Excess			0.13	(0.73)	(0.37)	0.08				
BlackRock Mortgages	$516	2.75	(0.54)	(1.30)	2.03	(11.58)	(0.91)	4.81	7.04	0.97
NYC Custom Mortgage Benchmark [7]			(0.64)	(1.52)	1.87	(11.81)	(1.04)	3.91	6.68	1.01
Excess			0.11	0.22	0.17	0.23	0.14	0.90	0.36	(0.04)
Wellington Mortgages	$233	1.24	(0.59)	(1.42)	2.23	(11.95)	(0.91)			
Bloomberg US Mortgage Backed Securities			(0.64)	(1.52)	1.87	(11.81)	(1.04)			
Excess			0.05	0.10	0.36	(0.14)	0.13			
SSGA LI Treasury	$21	0.11	(1.87)	(4.29)	2.95	(20.74)	(3.75)	14.04	10.67	(0.20)
NYC - Treasury Agency Plus Five			(1.94)	(4.60)	2.86	(20.58)	(3.78)	12.85	10.40	(0.05)
Excess			0.08	0.31	0.10	(0.16)	0.03	1.18	0.27	(0.15)

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
SSGA IT Treasury 1-10Y [8]	$929	4.96	(1.10)	(0.99)	1.25	(7.79)	(1.74)	5.74	5.08	2.03
USBIG TSY AGN 1-10			(1.11)	(1.08)	1.26	(7.79)	(1.66)	5.72	5.18	1.42
Excess			0.01	0.09	(0.01)	(0.00)	(0.08)	0.03	(0.09)	0.61
SSGA ST Treasury 1-3Y [9]	$574	3.06	(0.57)	0.24	1.05	(3.68)	(0.59)	2.31	3.56	1.53
FTSE US Government Bond 1-3 Years Index			(0.56)	0.16	1.04	(3.74)	(0.58)	3.09	3.56	1.56
Excess			(0.01)	0.09	0.01	0.06	(0.02)	(0.78)	0.00	(0.03)
SSGA LT Treasury 10Y Plus	$500	2.67	(2.30)	(6.80)	4.57	(29.56)	(4.99)	17.57	14.88	(1.83)
FTSE US Government Bond 10+ Years Index			(2.30)	(7.50)	4.39	(29.75)	(4.63)	17.72	14.89	(1.89)
Excess			(0.01)	0.71	0.19	0.19	(0.36)	(0.16)	(0.01)	0.05
HIGH YIELD										
Brigade High Yield	$137	0.73	2.88	5.47	5.64	(13.39)	8.02	8.08	15.07	
Bloomberg U.S. HY - 2% Issuer Cap			1.75	9.07	5.38	(11.18)	5.26	7.05	14.32	
Excess			1.13	(3.60)	0.26	(2.21)	2.76	1.04	0.75	
Eaton Vance High Yield	$162	0.87	1.07	9.08	5.12	(9.36)	5.02	5.62	14.66	
Bloomberg U.S. HY - 2% Issuer Cap			1.75	9.07	5.38	(11.18)	5.26	7.05	14.32	
Excess			(0.69)	0.01	(0.26)	1.82	(0.24)	(1.43)	0.35	
Mackay Shields High Yield	$163	0.87	1.39	9.18	5.52	(8.44)	5.52	8.00	13.87	
Bloomberg U.S. HY - 2% Issuer Cap			1.75	9.07	5.38	(11.18)	5.26	7.05	14.32	
Excess			(0.36)	0.11	0.14	2.74	0.26	0.95	(0.45)	
Nomura High Yield	$139	0.74	1.83	10.33	6.25	(10.71)	6.59	7.99	12.74	
Bloomberg U.S. HY - 2% Issuer Cap			1.75	9.07	5.38	(11.18)	5.26	7.05	14.32	
Excess			0.08	1.26	0.87	0.48	1.33	0.94	(1.58)	
Shenkman High Yield	$176	0.94	1.87	9.89	5.80	(8.49)	4.55	6.68	14.10	
Bloomberg U.S. HY - 2% Issuer Cap			1.75	9.07	5.38	(11.18)	5.26	7.05	14.32	
Excess			0.12	0.82	0.42	2.69	(0.71)	(0.37)	(0.22)	

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

STATE STREET

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
T Rowe Price High Yield	$302	1.61	1.66	9.63	5.46	(10.99)	6.31	7.22	15.65	(2.34)
Bloomberg U.S. HY - 2% Issuer Cap			1.75	9.07	5.38	(11.18)	5.26	7.05	14.32	(2.08)
Excess			(0.09)	0.56	0.08	0.19	1.05	0.17	1.33	(0.26)
BANK LOANS										
Barings Bank Loans	$0	0.00						1.12	7.82	0.38
CSFB LEVERAGED LOAN INDEX								2.78	8.17	1.14
Excess								(1.66)	(0.36)	(0.76)
Bain Bank Loans	$1	0.00								
CSFB LEVERAGED LOAN INDEX										
Excess										
TIPS										
BlackRock TIPS	$170	0.91	(1.45)	(1.47)	1.93	(11.89)	5.72	11.01	8.42	(1.18)
Bloomberg Global Infl-Linked: U.S. TIPS			(1.42)	(1.40)	1.87	(11.85)	5.96	10.99	8.43	(1.26)
Excess			(0.03)	(0.07)	0.06	(0.05)	(0.24)	0.02	(0.01)	0.08
SSGA TIPS	$556	2.97	(1.45)	(1.45)	1.97	(11.91)	5.89	10.96	8.44	(1.30)
Bloomberg Global Infl-Linked: U.S. TIPS			(1.42)	(1.40)	1.87	(11.85)	5.96	10.99	8.43	(1.26)
Excess			(0.03)	(0.05)	0.10	(0.07)	(0.06)	(0.03)	0.02	(0.04)
CORE FI-DEVELOPING MANAGERS										
LM Capital-Core Plus	$30	0.16	(0.57)	0.44	2.65	(12.46)	(1.38)	9.09	9.55	(1.30)
Bloomberg U.S. Aggregate			(0.84)	(0.94)	2.09	(13.01)	(1.54)	7.51	8.72	0.01
Excess			0.27	1.38	0.55	0.55	0.16	1.58	0.84	(1.32)
Pugh-CorePlus	$14	0.08	(0.56)	(0.07)	2.69	(13.23)	(1.35)			
Bloomberg U.S. Aggregate			(0.84)	(0.94)	2.09	(13.01)	(1.54)			
Excess			0.28	0.87	0.59	(0.22)	0.19			

Public Markets Manager Performance Detail

STATE STREET

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
GIA-Core Plus	$34	0.18	(0.43)	0.77	2.90	(13.13)	(0.76)	7.87	10.17	(1.11)
Bloomberg U.S. Aggregate			(0.84)	(0.94)	2.09	(13.01)	(1.54)	7.51	8.72	0.01
Excess			0.41	1.71	0.81	(0.12)	0.78	0.37	1.46	(1.12)
ECONOMICALLY TARGETED INVESTMENTS										
AFL-CIO Housing Investment Trust	$55	0.30	(0.90)	(2.23)	1.94	(13.55)	(1.04)	6.20	7.78	0.16
Bloomberg U.S. Aggregate			(0.84)	(0.94)	2.09	(13.01)	(1.54)	7.51	8.72	0.01
Excess			(0.05)	(1.29)	(0.15)	(0.54)	0.50	(1.31)	(0.94)	0.15
RBC Access MBS	$26	0.14	(0.79)	(1.64)	1.79	(12.00)	(1.03)	6.14	7.21	0.49
Access RBC Benchmark			(0.76)	(1.37)	1.64	(10.38)	(1.46)	4.69	6.05	1.17
Excess			(0.04)	(0.27)	0.15	(1.61)	0.43	1.45	1.16	(0.69)
CPC Construction Facility	$5	0.03	0.61	7.17	4.83	3.77	3.87	0.67	6.86	4.14
CPC CONST BENCHMARK			1.50	5.33	2.93	3.75	2.42	2.73	4.09	3.99
Excess			(0.88)	1.84	1.90	0.01	1.45	(2.06)	2.77	0.15
BOA PPAR FNMA	$1	0.01	(2.63)	2.02	1.61	(8.50)	(1.89)	6.12	13.54	2.33
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)	5.14	7.80	1.86
Excess			(2.18)	2.60	(0.53)	2.78	(1.52)	0.98	5.74	0.47
Citibank PPAR FNMA	$3	0.01	(2.64)	1.40	1.96	(11.34)	(1.56)	7.06	19.71	2.63
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)	5.14	7.80	1.86
Excess			(2.19)	1.98	(0.19)	(0.06)	(1.19)	1.92	11.91	0.77
Citibank PPAR GNMA	$1	0.00	(1.31)	2.45	1.83	(5.04)	(1.10)	8.31	5.33	1.90
GNMA Plus 65bps			(0.39)	(0.40)	2.28	(10.14)	(0.82)	4.31	6.73	1.63
Excess			(0.92)	2.85	(0.45)	5.10	(0.29)	4.00	(1.41)	0.27
CFSB PPAR FNMA	$0	0.00	(2.85)	1.03	1.95	(12.29)	(2.05)			
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)			
Excess			(2.41)	1.62	(0.20)	(1.01)	(1.67)			

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
CFSB PPAR GNMA	$0	0.00	(1.31)	1.83	1.74	(5.29)	0.03	8.01	5.91	0.99
GNMA Plus 65bps			(0.39)	(0.40)	2.28	(10.14)	(0.82)	4.31	6.73	1.63
Excess			(0.92)	2.23	(0.53)	4.85	0.84	3.69	(0.82)	(0.65)
CPC PPAR FNMA	$3	0.01	(2.39)	1.51	1.99	(10.21)	1.14	7.00	13.18	2.31
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)	5.14	7.80	1.86
Excess			(1.94)	2.10	(0.16)	1.07	1.51	1.87	5.38	0.45
ECLF PPAR FNMA	$1	0.01	(2.85)	1.26	2.02	(11.97)	(1.65)			
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)			
Excess			(2.40)	1.84	(0.13)	(0.69)	(1.28)			
JPMC PPAR FNMA	$6	0.03	(2.60)	0.34	1.70	(11.48)	(1.84)	8.33	14.68	1.68
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)	5.14	7.80	1.86
Excess			(2.16)	0.92	(0.45)	(0.21)	(1.47)	3.19	6.88	(0.18)
LIIF PPAR FNMA	$2	0.01	(2.61)	2.64	1.89	(9.29)	(1.75)	6.44	16.35	2.27
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)	5.14	7.80	1.86
Excess			(2.16)	3.22	(0.25)	1.99	(1.37)	1.30	8.55	0.41
LIIF PPAR GNMA	$0	0.00	1.87	4.69	4.06	(2.79)	0.84	6.19	5.54	2.53
GNMA Plus 65bps			(0.39)	(0.40)	2.28	(10.14)	(0.82)	4.31	6.73	1.63
Excess			2.26	5.09	1.78	7.35	1.65	1.87	(1.19)	0.89
LISC PPAR FNMA	$3	0.02	(2.89)	(4.11)	1.96	(16.45)	(1.69)	31.93	14.95	
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)	5.14	7.80	
Excess			(2.45)	(3.52)	(0.18)	(5.17)	(1.32)	26.80	7.15	
NCBCI PPAR FNMA	$0	0.00	(1.10)	2.26	1.95	(4.39)	0.66	8.49	4.08	2.00
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)	5.14	7.80	1.86
Excess			(0.65)	2.85	(0.19)	6.89	1.03	3.36	(3.72)	0.15

Public Markets Manager Performance Detail

Net Returns Through June 30, 2023

	Market Value ($MM)	% of Total	3 Month	FYTD	CYTD	2022	2021	2020	2019	2018
NCBCI PPAR GNMA	$0	0.00	(1.06)	2.16	1.91	(4.17)	0.95	8.16	3.69	1.23
GNMA Plus 65bps			(0.39)	(0.40)	2.28	(10.14)	(0.82)	4.31	6.73	1.63
Excess			(0.67)	2.56	(0.37)	5.97	1.77	3.85	(3.04)	(0.41)
Wells Fargo PPAR FNMA	$1	0.01	(2.92)	1.40	1.92	(11.70)	(1.86)	28.61	21.71	
FNMA Plus 85bps			(0.45)	(0.59)	2.14	(11.28)	(0.37)	5.14	7.80	
Excess			(2.47)	1.98	(0.22)	(0.42)	(1.48)	23.48	13.91	
CASH										
Short Term FIRE	$177	0.94	1.26	3.82	2.39	1.42	0.07	0.45	2.27	1.97
ICE BofA US 3-Month Treasury Bill			1.17	3.59	2.25	1.46	0.05	0.67	2.28	1.87
Excess			0.09	0.23	0.13	(0.04)	0.02	(0.21)	(0.01)	0.09
Cash Account	$0	0.00								
Securities Lending	$0	0.00								

STATE STREET

New York City
Fire Department Pension Fund, Subchapter Two

Appendix C

Alternative Assets Manager Performance Detail

Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
TOTAL PRIVATE EQUITY		3,436,553,432	2,706,603,958	2,628,984,616	1,708,796,877	1.60x	12.3%
TOTAL LIQUIDATED		252,261,598	277,328,836	361,268,461	20,769	1.30x	6.9%
TOTAL ACTIVE		3,184,291,834	2,429,275,122	2,267,716,155	1,708,776,108	1.64x	13.6%
TOTAL ACTIVE							
Cypress Merchant Banking Partners II, L.P.	1999	22,586,486	26,972,134	25,292,077	9,237	0.94x	-1.2%
Lincolnshire Equity Fund II, L.P.	1999	6,899,005	7,223,050	14,158,254	26,420	1.96x	24.6%
SCP Private Equity Partners II, L.P.	2000	15,000,000	16,834,296	6,514,303	1,204,446	0.46x	-8.2%
Apollo Investment Fund V, L.P.	2001	15,000,000	23,379,009	46,122,367	127,562	1.98x	38.8%
CVC European Equity Partners III, L.P.	2001	10,000,000	11,880,366	29,775,858	694,513	2.56x	41.0%
Ares Corporate Opportunities Fund, L.P.	2003	5,000,000	5,998,308	8,941,880	6,020	1.49x	13.1%
Blackstone Capital Partners IV, L.P.	2003	13,875,989	17,172,972	42,140,062	53,148	2.46x	36.3%
FS Equity Partners V, L.P.	2003	10,000,000	8,586,776	16,889,363	564,839	2.03x	15.2%
FdG Capital Partners II LP	2004	5,000,000	5,387,768	6,421,816	110,025	1.21x	3.7%
Lincolnshire Equity Fund III, L.P.	2004	5,000,000	5,046,815	7,777,717	1,857,303	1.91x	27.6%
Markstone Capital Partners, LP	2004	5,000,000	5,862,384	2,477,825	34,027	0.43x	-29.0%
Medica III Investments (International) L.P.	2004	3,000,000	2,992,836	1,267,948	508,000	0.59x	-8.1%
New York/Fairview Emerging Managers Fund, L.P.-Tranche 1	2004	2,000,000	2,053,879	2,189,349	30,025	1.08x	1.3%
Yucaipa American Alliance Fund I, LP	2004	5,000,000	7,491,869	8,800,690	12,642	1.18x	3.9%
Arlington Capital Partners II, L.P.	2005	4,000,000	4,069,527	7,137,350	41,511	1.76x	11.3%
FirstMark Capital I, L.P. (fka FirstMark IV)	2005	1,500,000	1,639,064	12,134,786	2,079,005	8.67x	33.0%
JP Morgan Fleming (Tranche A)	2005	3,000,000	3,025,678	3,415,831	346,613	1.24x	3.9%
Palladium Equity Partners III, L.P.	2005	10,000,000	10,543,150	20,097,730	14,492	1.91x	15.3%
Snow Phipps Group, L.P.	2005	5,000,000	6,126,360	5,586,954	2,281,019	1.28x	4.6%
USPF II Institutional Fund, L.P.	2005	5,000,000	6,594,940	7,911,623	61,346	1.21x	3.3%
Aisling Capital II, LP	2006	1,000,000	1,178,021	1,141,279	42,656	1.01x	0.1%
Apollo Investment Fund VI, L.P.	2006	20,000,000	25,741,832	38,519,613	360,072	1.51x	8.6%
Atlantic Equity Partners IV, L.P.	2006	3,768,757	3,686,806	4,216,664	1,490,133	1.55x	4.0%
Blackstone Capital Partners V, L.P.	2006	9,448,250	10,065,709	16,489,375	84,291	1.65x	8.0%
Catterton Partners VI, L.P.	2006	5,000,000	5,693,763	9,844,554	1,204,603	1.94x	11.4%
Coller International Partners V, L.P.	2006	5,000,000	4,372,182	5,963,424	18,753	1.37x	7.5%
Falconhead Capital Partners II, L.P.	2006	4,000,000	4,640,878	7,151,330	127,420	1.57x	6.6%
First Reserve Fund XI, L.P.	2006	5,000,000	5,313,265	3,518,155	2,249	0.66x	-9.4%

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
GF Capital Private Equity Fund, L.P.	2006	3,000,000	3,076,007	4,058,641	1,773,299	1.90x	11.4%
MidOcean Partners III, L.P.	2006	9,705,796	11,662,930	26,004,939	18,553	2.23x	13.6%
Permira IV, L.P.	2006	5,527,079	6,016,234	8,822,843	1,241,871	1.67x	9.1%
RRE Ventures IV, L.P.	2006	2,500,000	3,188,791	4,536,915	893,889	1.70x	6.3%
The Fourth Cinven Fund	2006	2,735,927	2,870,280	4,124,333	1,700	1.44x	7.3%
Carlyle Partners V, L.P.	2007	10,000,000	10,340,844	18,478,605	493,483	1.83x	13.7%
FTVentures III, LP	2007	2,500,000	2,768,623	5,452,899	775,702	2.25x	15.3%
Gleacher Mezzanine Fund II, L.P.	2007	3,000,000	2,753,091	3,701,378	327	1.34x	10.6%
GSO Capital Opportunities Fund LP	2007	7,500,000	11,229,550	15,937,873	150,427	1.43x	17.3%
Highland Consumer Fund I LP	2007	2,000,000	2,003,212	1,417,209	133,376	0.77x	-3.2%
Montreux Equity Partners IV, L.P.	2007	5,000,000	5,000,000	2,761,158	3,734,335	1.30x	3.1%
New Mountain Partners III, L.P.	2007	10,000,000	10,589,531	25,179,571	419,855	2.42x	14.6%
Olympus Capital Asia III, L.P.	2007	5,000,000	5,854,855	3,267,979	424,230	0.63x	-9.6%
PCG Clean Energy & Technology Fund (East), LLC	2007	10,000,000	9,047,736	2,794,136	720,308	0.39x	-11.0%
Pegasus Partners IV, L.P.	2007	7,500,000	9,152,510	6,958,262	969,844	0.87x	-2.6%
Pine Brook Capital Partners, L.P.	2007	7,500,000	8,524,960	11,174,201	530,661	1.37x	7.8%
Princeton Capital Corp. (fka Capital Point)	2007	3,000,000	3,497,432	2,525,081	880,540	0.97x	-0.4%
SCP Vitalife Partners II Fund	2007	5,000,000	5,024,924	395	923,638	0.18x	-13.4%
Trilantic Capital Partners IV L.P.	2007	7,236,332	7,390,450	11,303,123	378,366	1.58x	13.1%
United States Power Fund III, L.P.	2007	5,000,000	5,915,665	7,586,407	149,063	1.31x	4.4%
Vista Equity Partners Fund III, L.P.	2007	7,500,000	8,072,451	19,159,878	874,590	2.48x	26.8%
Aisling Capital III, LP	2008	3,500,000	3,948,800	9,313,390	21,740	2.36x	26.0%
Apollo Investment Fund VII, L.P.	2008	25,000,000	30,660,396	53,237,683	282,543	1.75x	22.6%
Ares Corporate Opportunities Fund III, L.P.	2008	10,000,000	12,252,779	25,936,280	99,782	2.12x	20.2%
Avista Capital Partners II, L.P.	2008	10,000,000	13,180,598	21,191,004	448,100	1.64x	14.4%
Blue Wolf Capital Fund II, L.P.	2008	3,000,000	3,292,142	5,572,111	17,238	1.70x	10.7%
Bridgepoint Europe IV	2008	6,661,826	6,827,673	9,307,133	1,149,990	1.53x	9.5%
Crestview Partners II, L.P.	2008	7,500,000	9,150,572	14,378,354	3,273,324	1.93x	13.9%
CVC European Equity Partners V, L.P.	2008	13,729,919	14,803,920	28,829,170	317,953	1.97x	16.4%
Euro Choice IV L.P.	2008	6,441,168	6,023,874	8,189,279	158,978	1.39x	6.2%
First Reserve Fund XII, L.P.	2008	5,000,000	5,554,103	2,889,175	6,092	0.52x	-17.9%
GCM Grosvenor NYCFDPF Emerging Manager Fund, L.P.	2008	8,979,798	11,950,676	13,809,298	3,761,251	1.47x	8.9%
GI Partners Fund III L.P.	2008	7,500,000	8,086,843	12,702,734	3,531	1.57x	13.0%

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
Landmark Equity Partners XIV, L.P.	2008	13,630,000	13,312,305	16,880,844	1,018,211	1.34x	9.4%
Levine Leichtman Capital Partners IV, L.P.	2008	5,000,000	5,353,601	8,479,347	473,584	1.67x	17.8%
Milestone Partners III, L.P.	2008	3,000,000	3,237,896	2,857,008	546,275	1.05x	0.8%
New York/Fairview Emerging Managers Fund, L.P.-Tranche 2	2008	5,000,000	5,065,974	10,949,444	2,409,891	2.64x	17.5%
NGN BioMed Opportunity II, L.P.	2008	5,000,000	4,787,955	3,836,553	2,397,950	1.30x	3.2%
Onex Partners III LP	2008	5,000,000	5,484,081	8,221,974	852,989	1.65x	11.4%
Paladin III (NY City), L.P.	2008	7,500,000	10,599,720	21,358,828	2,877,618	2.29x	13.2%
Riverstone/Carlyle Global Energy & Power Fund IV, L.P.	2008	7,500,000	8,640,420	9,341,385	3,058	1.08x	2.1%
Yucaipa American Alliance Fund II, LP	2008	15,000,000	20,587,385	22,408,545	12,238,508	1.68x	8.0%
Yucaipa Corporate Initiatives Fund II, LP	2008	4,676,976	4,592,705	4,071,552	66,081	0.90x	-1.4%
FS Equity Partners VI, L.P.	2009	12,500,000	12,613,697	35,645,530	5,541,272	3.27x	23.7%
Lexington Capital Partners VII, L.P.	2009	10,000,000	8,959,746	13,602,260	1,209,705	1.65x	13.8%
Lincolnshire Equity Fund IV, L.P.	2009	2,500,000	2,703,593	3,231,707	648,012	1.44x	8.0%
NorthBound Emerging Manager Custom Fund LP	2009	5,000,000	4,366,772	6,663,730	623,616	1.67x	12.1%
Scale Venture Partners III, LP	2009	5,000,000	4,981,767	12,750,882	1,877,130	2.94x	22.7%
Welsh, Carson, Anderson & Stowe XI, L.P.	2009	7,500,000	7,448,557	12,051,289	519,476	1.69x	11.7%
Comvest Investment Partners IV, L.P.	2010	20,000,000	20,946,864	34,552,171	2,644,958	1.78x	27.6%
Snow Phipps II, L.P.	2010	7,500,000	9,133,810	8,154,530	4,120,445	1.34x	7.1%
Trident V, L.P.	2010	15,000,000	17,749,233	24,893,840	9,064,338	1.91x	12.0%
American Securities Partners VI, L.P.	2011	20,000,000	22,430,793	39,236,550	11,893,043	2.28x	21.9%
Ampersand 2011	2011	5,000,000	5,000,000	16,193,623	39,441	3.25x	21.8%
AXA Secondary Fund V B L.P.	2011	40,000,000	32,956,743	52,820,879	110,284	1.61x	15.4%
BC European Capital IX	2011	21,467,659	24,986,826	30,264,599	9,321,453	1.58x	10.5%
BDCM Opportunity Fund III, L.P.	2011	10,000,000	14,925,927	13,677,251	15,792,342	1.97x	11.5%
Blackstone Capital Partners VI, L.P.	2011	10,000,000	10,749,121	15,202,466	4,078,446	1.79x	12.4%
EQT VI, L.P.	2011	17,785,692	18,925,422	33,022,772	20,969	1.75x	13.6%
Pegasus Partners V, L.P.	2011	6,236,975	8,035,510	6,817,802	3,586,144	1.29x	5.7%
Platinum Equity Capital Partners III, L.P.	2011	25,000,000	21,435,585	43,022,706	4,653,406	2.22x	35.8%
Vista Equity Partners Fund IV, L.P.	2011	30,000,000	31,301,795	39,522,402	22,954,400	2.00x	14.9%
Wellspring Capital Partners V, L.P.	2011	7,500,000	7,972,133	11,360,178	2,404,413	1.73x	15.4%
Ares Corporate Opportunities Fund IV, L.P.	2012	20,000,000	21,350,144	33,229,313	7,002,646	1.88x	14.7%
Green Equity Investors VI, L.P.	2012	25,000,000	28,011,787	29,503,559	26,710,663	2.01x	14.1%
NYCFPF - 2012 Emerging Manager Program	*2012*	*22,700,000*	*24,145,895*	*39,044,797*	*14,277,239*	*2.21x*	*18.3%*

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Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
Palladium Equity Partners IV, L.P.	2012	10,000,000	10,252,396	7,216,906	9,441,450	1.62x	10.4%
Summit Partners Growth Equity Fund VIII-A, L.P.	2012	30,000,000	34,309,073	70,416,221	14,618,481	2.48x	26.4%
Trilantic Capital Partners V L.P.	2012	10,000,000	10,939,709	15,002,270	3,374,911	1.68x	15.6%
Warburg Pincus Private Equity XI, L.P.	2012	35,000,000	36,934,440	48,288,203	14,936,039	1.71x	12.1%
Apollo Investment Fund VIII, L.P.	2013	40,000,000	39,069,416	43,243,090	14,880,839	1.49x	10.0%
ASF VI B L.P.	2013	30,000,000	24,788,293	32,035,986	4,363,829	1.47x	12.2%
Carlyle Partners VI, L.P.	2013	20,000,000	21,754,765	32,155,871	9,312,323	1.91x	15.1%
Crestview Partners III, L.P.	2013	24,000,000	22,376,252	13,502,313	20,572,409	1.52x	11.9%
Landmark - NYC Fund I, L.P.	2013	9,000,000	8,246,317	9,836,668	4,741,796	1.77x	15.6%
Landmark Equity Partners XV, L.P.	2013	26,000,000	20,871,107	24,169,733	5,516,251	1.42x	11.9%
ASF VI B NYC Co-Invest L.P.	2014	10,000,000	8,590,312	10,586,096	2,371,468	1.51x	12.4%
Bridgepoint Europe V L.P.	2014	11,363,954	10,934,719	14,951,251	6,426,325	1.96x	18.5%
Carlyle Partners VI, L.P. (Side Car)	2014	1,715,000	1,118,294	2,032,051	1,162,843	2.86x	12.3%
Crestview Partners III (Co-Investment B), L.P.	2014	8,000,000	8,284,349	394,887	9,799,773	1.23x	3.8%
CVC Capital Partners VI, L.P.	2014	35,342,859	38,442,966	42,269,543	35,544,974	2.02x	17.1%
Lexington Capital Partners VIII, L.P.	2014	40,000,000	36,383,049	36,118,389	24,579,390	1.67x	16.7%
Olympus Growth Fund VI, L.P.	2014	15,000,000	15,229,602	16,211,162	12,443,835	1.88x	16.7%
Vista Equity Partners Fund V, L.P.	2014	40,000,000	50,091,463	58,630,158	53,166,676	2.23x	19.5%
ASF VII B L.P.	2015	17,000,000	11,411,841	8,735,442	9,971,911	1.64x	16.8%
ASF VII B NYC Co-Invest L.P.	2015	9,000,000	6,310,753	6,021,672	5,133,249	1.77x	18.9%
Bridgepoint Europe V Co-Invest	2015	3,481,357	3,197,721	6,649,138	1,965,657	2.69x	27.1%
Centerbridge Capital Partners III, L.P.	2015	4,200,000	5,536,198	5,253,028	4,089,105	1.69x	18.6%
EQT VII, L.P.	2015	28,598,656	30,740,635	45,096,076	16,120,294	1.99x	22.5%
NYCFPF - 2015 Emerging Manager Program	*2015*	*26,250,000*	*25,652,311*	*10,206,932*	*36,604,060*	*1.82x*	*22.0%*
Siris Partners III, L.P.	2015	5,500,000	5,851,503	4,435,374	4,248,156	1.48x	11.8%
Warburg Pincus Private Equity XII, L.P.	2015	36,000,000	36,063,314	38,166,357	34,788,181	2.02x	18.1%
Welsh, Carson, Anderson & Stowe XII, L.P.	2015	14,000,000	13,417,537	19,676,823	13,168,075	2.45x	27.0%
American Securities Partners VII, L.P.	2016	14,000,000	13,714,837	7,217,737	19,087,456	1.92x	16.1%
Apax IX USD, L.P.	2016	22,000,000	23,730,927	26,523,589	21,412,629	2.02x	23.2%
BCEC X Co-Investment	2016	6,414,690	6,453,468	2,105,141	9,897,323	1.86x	15.7%
Platinum Equity Capital Partners IV, L.P.	2016	19,000,000	18,721,176	17,591,610	21,676,368	2.10x	25.0%
Vista Equity Partners Fund VI, L.P.	2016	28,000,000	34,936,431	29,364,413	42,484,744	2.06x	19.6%
Ares Corporate Opportunities Fund V, L.P.	2017	17,000,000	18,409,168	8,438,621	16,440,945	1.35x	9.6%

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
BC European Capital X	2017	15,940,366	15,121,501	2,708,395	19,578,154	1.47x	10.6%
CVC Capital Partners VII, L.P.	2017	30,187,346	29,512,669	7,692,159	43,437,215	1.73x	23.3%
Green Equity Investors VII, L.P.	2017	17,000,000	16,253,390	13,423,165	21,094,709	2.12x	22.6%
KKR Americas Fund XII, L.P.	2017	28,000,000	27,052,347	11,984,653	34,955,414	1.74x	20.6%
Palladium Equity Partners V, L.P.	2017	6,666,667	4,249,374	1,159,402	4,427,212	1.31x	10.3%
Warburg Pincus Financial Sector, L.P.	2017	21,000,000	21,133,677	8,091,567	30,184,675	1.81x	21.6%
Apollo Investment Fund IX, L.P.	2018	52,000,000	45,046,456	16,051,481	49,991,006	1.47x	25.0%
ASF VIII B L.P.	2018	36,000,000	19,001,395	4,637,339	23,887,998	1.50x	25.3%
Bridgepoint Europe VI	2018	23,605,887	19,765,826	2,051,094	28,543,279	1.55x	23.0%
EQT VIII Co-Investment	2018	7,904,259	7,628,750	5,928,922	9,828,561	2.07x	37.3%
EQT VIII, L.P.	2018	22,123,162	21,761,917	15,245,445	23,876,573	1.80x	26.9%
Platinum Equity Capital Partners IV Co-Investment, L.P.	2018	3,000,000	2,104,085	418,633	2,601,290	1.44x	9.2%
Platinum Equity Small Cap Fund, L.P.	2018	8,000,000	5,795,715	1,307,927	9,909,001	1.94x	30.4%
Siris Partners IV, L.P.	2018	18,000,000	14,946,175	2,142,111	21,279,995	1.57x	18.8%
Vista Equity Partners Fund VII, L.P.	2018	35,500,000	31,900,490	3,387,741	37,192,522	1.27x	10.7%
Apax X USD L.P.	2019	21,500,000	17,303,001	1,352,453	20,037,955	1.24x	19.8%
ASF VIII B NYC Co-Invest L.P.	2019	18,000,000	7,610,192	1,573,291	10,490,753	1.59x	39.3%
Blackstone Capital Partners VIII L.P.	2019	22,500,000	12,773,157	748,879	14,054,337	1.16x	12.5%
Bridgepoint Europe VI Co-Invest	2019	5,951,757	4,536,403	-	7,284,738	1.61x	19.9%
Crestview Partners IV (Co-Investment), L.P.	2019	4,666,667	2,635,197	873,903	3,611,973	1.70x	57.0%
Crestview Partners IV, L.P.	2019	14,000,000	7,905,593	2,269,553	9,574,078	1.50x	41.4%
KKR European Fund V (USD)	2019	17,650,000	15,272,152	2,947,179	15,329,310	1.20x	10.0%
Lexington Capital Partners IX	2019	21,375,000	17,050,981	4,607,564	20,626,420	1.48x	30.9%
Lexington IX Co-Invest	2019	7,125,000	3,491,606	1,428,728	4,479,979	1.69x	37.9%
Lindsay Goldberg V	2019	18,000,000	8,969,064	2,455,579	9,887,819	1.38x	26.4%
NYCFPF - 2019 Emerging Manager Program	*2019*	*41,050,000*	*11,722,420*	*1,180,934*	*18,394,656*	*1.67x*	*26.7%*
Platinum Equity Capital Partners V, L.P.	2019	32,000,000	32,680,964	5,099,575	43,249,069	1.48x	25.4%
Trilantic Capital Partners VI (North America) L.P.	2019	20,000,000	18,103,321	1,795,921	24,117,955	1.43x	19.7%
Warburg Pincus Global Growth, L.P.	2019	25,500,000	22,322,960	184,875	30,743,572	1.39x	15.1%
Welsh, Carson, Anderson & Stowe XIII, L.P.	2019	18,000,000	14,922,078	5,982,780	15,228,599	1.42x	26.1%
BC Partners Fund XI	2020	24,200,000	10,471,548	59,325	11,122,712	1.07x	NM
Clearlake Capital Partners VI, L.P.	2020	11,000,000	11,130,613	921,401	16,544,516	1.57x	28.9%
EQT IX (No. 2) USD SCSP	2020	21,018,000	20,631,614	2,039,842	22,509,709	1.19x	NM

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Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
EQT IX Co-Investment	2020	5,732,000	5,691,125	95,576	5,863,486	1.05x	NM
FTV VI	2020	3,500,000	3,436,046	402,005	5,468,486	1.71x	31.0%
Green Equity Investors VIII Coinvest N, L.P.	2020	7,500,000	5,370,720	-	6,402,286	1.19x	9.6%
Green Equity Investors VIII, L.P.	2020	22,500,000	19,608,674	182,294	22,224,634	1.14x	8.8%
Hg Genesis 9, L.P.	2020	11,319,368	9,192,357	1,906,664	8,801,868	1.16x	NM
KKR Asian Fund IV SCSp	2020	25,000,000	9,045,726	69,250	9,070,688	1.01x	NM
NYC-NorthBound Emerging Managers Program LP	2020	25,000,000	8,410,985	143,372	11,679,112	1.41x	NM
Valor Equity Partners V, L.P.	2020	5,500,000	5,002,156	13,238	6,864,816	1.38x	NM
Apax Digital Fund II, L.P.	2021	12,000,000	428,099	-	89,375	0.21x	NM
BC Partners XI Metro Co-Investment L.P.	2021	11,000,000	7,140,432	-	8,258,355	1.16x	NM
Clearlake Capital Partners VII, L.P.	2021	40,000,000	20,549,378	974	21,290,148	1.04x	NM
CVC Capital Partners VIII, L.P.	2021	37,898,059	21,756,429	126,577	23,360,537	1.08x	NM
Grain Communications Opportunity Fund III, L.P.	2021	5,000,000	3,173,990	12,090	2,916,106	0.92x	NM
Harbourvest Centre Street Co-Investment Fund L.P.	2021	39,000,000	20,910,501	-	20,787,616	0.99x	NM
Insight Partners XII	2021	30,000,000	20,836,492	33,152	17,934,404	0.86x	NM
Insight Partners XII Buyout Annex Fund, L.P.	2021	10,000,000	6,350,000	-	5,792,129	0.91x	NM
KKR North America Fund XIII, L.P.	2021	40,000,000	13,407,765	-	12,518,727	0.93x	NM
One Rock Capital Partners III, L.P.	2021	9,500,000	7,063,716	972,517	8,092,840	1.28x	NM
Platinum Equity Capital Partners V Co-Investment, L.P.	2021	8,000,000	7,893,183	1,212,429	14,743,327	2.02x	NM
Providence Strategic Growth V L.P.	2021	50,000,000	21,483,376	1,601,346	21,251,564	1.06x	NM
Reverence Capital Partners V (PE Fund III), L.P.	2021	10,000,000	2,243,523	16,275	2,039,987	0.92x	NM
Reverence III Side Car	2021	4,000,000	818,551	6,509	818,463	1.01x	NM
Stellex Capital Partners II	2021	12,000,000	7,417,568	451,087	7,546,201	1.08x	NM
The Resolute Fund V, L.P.	2021	16,500,000	13,767,637	143,059	20,538,683	1.50x	NM
Vistria Fund IV, L.P.	2021	11,000,000	8,122,098	155,043	8,345,800	1.05x	NM
Warburg Pincus Financial Sector II, L.P.	2021	19,500,000	7,538,887	-	9,720,145	1.29x	NM
Apax XI	2022	40,000,000	-	-	(356,389)	-	NM
EQT X	2022	30,000,000	501,699	501,699	(264,452)	0.47x	NM
EQT X Co-Invest	2022	10,000,000	1,820,538	-	1,811,142	0.99x	NM
FTV VII	2022	23,831,980	9,056,152	-	8,934,146	0.99x	NM
FTV VII Co-Invest	2022	5,362,200	1,569,829	-	1,567,758	1.00x	NM
Green Equity Investors IX Co-Invest	2022	10,000,000	-	-	-	-	NM
Green Equity Investors IX, L.P.	2022	30,000,000	-	-	(53,495)	-	NM

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Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
Hg Genesis 10	2022	18,963,590	243,071	-	225,719	0.93x	NM
Hg NYC Co-Invest	2022	6,666,667	2,186,433	-	2,435,964	1.11x	NM
Hg Saturn 3	2022	13,333,333	134,064	-	296,867	2.21x	NM
KKR European Fund VI (USD)	2022	12,000,000	-	-	(185,740)	-	NM
Lexington Capital Partners X	2022	30,000,000	-	-	991,847	-	NM
Lexington Capital Partners X Co-Invest	2022	10,000,000	1,971,737	-	2,400,196	1.22x	NM
Nordic Capital XI	2022	20,213,546	-	-	(217,274)	-	NM
Nordic Capital XI Co-Invest	2022	8,893,960	-	-	-	-	NM
Permira VIII	2022	31,446,726	4,801,455	-	4,610,352	0.96x	NM
Platinum Equity Capital Partners VI Co-Invest	2022	11,750,000	-	-	-	-	NM
Platinum Equity Capital Partners VI, L.P.	2022	35,250,000	2,348,641	-	1,852,655	0.79x	NM
Raine Partners IV	2022	7,333,333	-	-	(210,813)	-	NM
Thoma Bravo XV	2022	30,000,000	16,100,885	6,500	16,008,531	0.99x	NM
Thoma Bravo XV Co-Invest	2022	10,000,000	5,235,193	-	5,113,802	0.98x	NM
Welsh, Carson, Anderson & Stowe XIV, L.P.	2022	30,000,000	2,713,377	-	1,778,356	0.66x	NM
Welsh, Carson, Anderson & Stowe XIV, L.P. Side Car	2022	10,000,000	-	-	-	-	NM
Apollo Fund X NYC Sidecar Co-Invest, L.P.	2023	10,000,000	-	-	-	-	NM
Apollo Investment Fund X, L.P.	2023	30,000,000	-	-	(474,860)	-	NM
Bridgepoint Europe VII	2023	13,580,624	-	-	(232,809)	-	NM
Bridgepoint Europe VII Co-Invest	2023	6,792,186	-	-	-	-	NM
Valor Equity Partners VI, L.P.	2023	12,500,000	2,170,141	-	1,877,956	0.87x	NM
Vista Co-Invest Fund 2022-4, L.P.	2023	10,000,000	2,067,595	-	2,067,687	1.00x	NM
Vista Equity Partners Fund VIII, L.P.	2023	30,000,000	4,044,077	-	3,562,703	0.88x	NM

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2023

	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distrubutions	Market Value	Total Value Multiple	Net IRR%
TOTAL PRIVATE REAL ESTATE			1,769,379,267	1,383,105,153	893,382,593	1,149,432,550	1.46	9.0%
TOTAL PRIVATE REAL ESTATE								
PRISA SA	2006	Core Portfolio	7,000,000	7,530,220	4,207,069	11,608,671	2.10	5.3%
Prologis Targeted U.S. Logistics Fund	2006	Core Portfolio	35,000,000	36,745,383	3,938,666	47,718,889	1.41	8.1%
RREEF America REIT II	2006	Core Portfolio	7,000,000	9,178,399	6,127,696	11,906,221	1.96	5.7%
UBS Trumbull Property Fund	2006	Core Portfolio	27,000,000	41,453,456	50,831,969	13,646,634	1.56	6.2%
Heitman HART	2007	Core Portfolio	9,000,000	15,649,474	21,695,416	10,551,956	2.06	7.8%
JP Morgan Special Situation Property Fund	2007	Core Portfolio	5,000,000	5,870,702	2,787,659	7,930,047	1.83	4.7%
JP Morgan Strategic Property Fund	2007	Core Portfolio	22,000,000	24,459,391	33,282,569	23,328,478	2.31	7.5%
PRISA II	2007	Core Portfolio	20,228,233	21,417,377	10,834,188	36,017,793	2.19	6.2%
LaSalle Property Fund	2010	Core Portfolio	48,000,000	48,000,000	19,691,719	72,902,810	1.93	9.5%
NYC Asset Investor #2 LLC	2013	Core Portfolio	9,000,000	9,327,815	3,770,524	5,567,798	1.00	0.0%
MetLife Core Property Fund	2014	Core Portfolio	41,000,000	41,000,000	9,784,536	55,008,773	1.58	9.7%
Exeter Industrial Core Club Fund II	2016	Core Portfolio	6,000,000	5,782,201	2,493,758	11,295,383	2.38	20.8%
Jamestown Premier Property Fund	2016	Core Portfolio	8,000,000	11,784,591	4,770,926	5,176,542	0.84	-4.5%
NYCRS Artemis Co-Investment	2016	Core Portfolio	11,000,000	12,775,721	16,772,703	3,548,293	1.59	16.6%
USAA Eagle Real Estate Fund	2016	Core Portfolio	30,000,000	30,000,000	9,013,481	31,502,600	1.35	6.5%
Brookfield Premier Real Estate Partners	2017	Core Portfolio	19,000,000	25,522,905	6,855,222	34,783,552	1.63	10.5%
Carlyle Property Investors	2017	Core Portfolio	19,000,000	24,459,305	5,692,919	35,653,078	1.69	12.3%
Lion Industrial Trust - 2007	2017	Core Portfolio	50,000,000	64,767,732	14,053,271	116,698,348	2.02	20.4%
Almanac Realty Securities VIII	2019	Core Portfolio	10,500,000	6,159,040	1,237,988	6,295,876	1.22	12.1%
Almanac Realty Securities VIII (Sidecar II)	2019	Core Portfolio	7,000,000	4,237,875	999,984	4,728,265	1.35	18.4%
Artemis Real Estate Partners Income and Growth Fund	2019	Core Portfolio	10,000,000	7,976,363	2,089,514	6,103,489	1.03	1.8%
Harrison Street Core Property Fund, L.P.	2019	Core Portfolio	6,700,000	7,951,150	1,077,173	8,817,368	1.24	7.5%
Heitman Core Real Estate Debt Income Trust	2019	Core Portfolio	8,000,000	10,268,551	2,268,552	9,591,109	1.15	4.3%
HSRE-Centre Street Core Co-Investment, L.P.	2019	Core Portfolio	3,300,000	3,177,671	309,378	4,199,691	1.42	14.0%
Cortland Partners Growth and Income Fund	2020	Core Portfolio	25,000,000	28,162,555	3,554,618	34,594,743	1.35	13.3%
Exeter Industrial Core Fund III, LP	2020	Core Portfolio	21,300,000	20,931,604	2,297,453	22,420,836	1.18	9.7%
Kayne Anderson Core Real Estate Fund	2020	Core Portfolio	10,000,000	11,279,989	1,402,269	12,341,037	1.22	8.0%
Ares Industrial Real Estate Fund LP	2021	Core Portfolio	40,000,000	41,631,631	1,631,631	49,427,164	1.23	15.2%
LaSalle GPS Co-Investment Program - Core/Core-Plus	2021	Core Portfolio	17,200,000	10,612,882	448,166	10,956,125	1.07	6.6%
EQT Exeter Industrial Core-Plus Fund IV, LP	2022	Core Portfolio	50,000,000	4,820,000	-	4,210,823	0.87	-12.7%
TPG Real Estate Thematic Advantage Core-Plus	2022	Core Portfolio	40,000,000	18,659,951	-	18,808,001	1.01	0.9%
Blackstone Fund IV	2004	Non-Core Portfolio	5,000,000	6,406,782	9,142,779	44,142	1.43	10.4%
Blackstone Real Estate Partners VI	2007	Non-Core Portfolio	10,000,000	11,170,327	22,123,258	158,814	1.99	13.2%
Carlyle Realty Partners V	2007	Non-Core Portfolio	5,000,000	6,355,442	9,686,620	10,859	1.53	9.0%

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Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distrubutions	Market Value	Total Value Multiple	Net IRR%
Metropolitan Workforce Housing Fund	2007	Non-Core Portfolio	3,500,000	3,503,257	4,186,143	62,696	1.21	3.8%
AG Realty Fund VII	2008	Non-Core Portfolio	15,000,000	14,066,700	21,201,546	24,903	1.51	12.5%
American Value Partners Fund I	2008	Non-Core Portfolio	5,000,000	3,785,294	3,471,997	529,452	1.06	0.9%
Ares European Real Estate Fund III, LP	2008	Non-Core Portfolio	15,000,000	15,243,750	16,771,250	55,466	1.10	2.5%
Silverpeak Legacy Partners III	2008	Non-Core Portfolio	5,000,000	2,216,844	469,649	109,880	0.26	-13.1%
Stockbridge Real Estate Fund III	2008	Non-Core Portfolio	13,500,000	13,499,074	8,414,877	8,125,760	1.23	2.3%
Thor Urban Property Fund II	2009	Non-Core Portfolio	5,000,000	6,849,514	6,959,072	547,361	1.10	2.8%
Walton Street Real Estate Fund VI	2009	Non-Core Portfolio	5,000,000	4,432,393	5,072,700	2,178,523	1.64	8.4%
Blackstone Real Estate Partners Europe III (USD Vehicle)	2010	Non-Core Portfolio	5,000,000	5,327,529	7,267,791	383,696	1.44	10.0%
Westbrook Real Estate Fund VIII	2010	Non-Core Portfolio	5,000,000	5,985,544	6,889,968	666,367	1.26	9.3%
Carlyle Realty Partners VI	2011	Non-Core Portfolio	20,000,000	19,487,273	31,459,819	1,730,012	1.70	24.2%
H/2 Special Opportunities Fund II	2011	Non-Core Portfolio	10,000,000	10,000,001	14,572,404	167,683	1.47	13.2%
Blackstone Real Estate Partners VII	2012	Non-Core Portfolio	30,000,000	38,295,846	59,455,776	5,666,626	1.70	15.6%
Brookfield Strategic Real Estate Partners	2012	Non-Core Portfolio	15,000,000	17,630,084	31,355,174	3,460,688	1.97	18.4%
Taconic New York City Investment Fund LP	2012	Non-Core Portfolio	20,000,000	8,363,637	13,682,720	1,487,010	1.81	15.5%
NYC Asset Investor #1 LLC	2013	Non-Core Portfolio	5,000,000	5,600,357	2,857,322	3,105,474	1.06	1.1%
NYC Asset Investor #3 LLC	2013	Non-Core Portfolio	6,000,000	4,375,683	1,207,701	3,971,494	1.18	3.1%
Blackstone Real Estate Partners Europe IV (USD Vehicle)	2014	Non-Core Portfolio	26,000,000	25,485,144	32,398,007	4,201,629	1.44	11.4%
Carlyle Realty Partners VII	2014	Non-Core Portfolio	15,000,000	13,813,903	17,768,567	3,672,587	1.55	14.6%
Divco West Fund IV	2014	Non-Core Portfolio	30,000,000	29,700,495	49,042,015	1,697,788	1.71	24.9%
Lone Star Real Estate Fund III	2014	Non-Core Portfolio	25,000,000	23,435,387	31,708,871	106,309	1.36	14.1%
Blackstone Real Estate Partners VIII	2015	Non-Core Portfolio	31,500,000	35,895,017	37,195,935	24,043,757	1.71	16.5%
H/2 Special Opportunities Fund III	2015	Non-Core Portfolio	15,000,000	15,577,770	15,545,491	3,960,032	1.25	7.2%
European Property Investors Special Opportunities IV (EPISO IV)	2016	Non-Core Portfolio	10,059,238	9,050,919	3,666,410	8,849,291	1.38	7.9%
PW Real Estate Fund III LP	2016	Non-Core Portfolio	9,562,261	7,888,490	19,446,852	3,726,025	2.94	30.7%
Westbrook Real Estate Fund X	2016	Non-Core Portfolio	8,000,000	7,776,175	6,823,862	2,736,699	1.23	9.3%
Divco West Fund V	2017	Non-Core Portfolio	12,000,000	8,171,514	2,184,158	7,911,132	1.24	5.2%
DRA Growth and Income Fund IX	2017	Non-Core Portfolio	8,000,000	8,172,028	7,702,422	5,863,311	1.66	17.6%
Exeter Industrial Value Fund IV	2017	Non-Core Portfolio	10,000,000	9,443,137	19,284,259	1,462,000	2.20	30.4%
H/2 Special Opportunities Fund IV	2017	Non-Core Portfolio	19,000,000	19,000,000	4,305,637	18,850,551	1.22	6.1%
KKR CMBS B-Piece SMA	2017	Non-Core Portfolio	25,000,000	22,313,016	9,729,295	22,324,810	1.44	9.3%
Lone Star Real Estate Fund V	2017	Non-Core Portfolio	23,100,000	7,492,053	3,836,178	2,649,529	0.87	-6.6%
Pramerica Real Estate Capital VI (PRECap VI)	2017	Non-Core Portfolio	10,040,161	10,809,801	8,852,437	3,793,616	1.17	8.3%
Basis Investment Group Fund I	2018	Non-Core Portfolio	4,100,000	4,275,751	2,913,134	2,731,707	1.32	12.0%
KKR Real Estate Partners Americas II	2018	Non-Core Portfolio	20,070,000	21,244,835	27,163,671	6,816,673	1.60	27.6%
AERMONT Real Estate Fund IV	2019	Non-Core Portfolio	10,271,627	7,129,484	-	5,866,028	0.82	-10.0%
Blackstone Real Estate Partners IX	2019	Non-Core Portfolio	34,000,000	34,925,508	11,251,894	39,856,023	1.46	27.1%

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Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distrubutions	Market Value	Total Value Multiple	Net IRR%
Brookfield Strategic Real Estate Partners III	2019	Non-Core Portfolio	30,000,000	26,781,305	6,793,570	28,951,998	1.33	13.4%
Blackstone Real Estate Partners Europe VI (EURO Vehicle)	2020	Non-Core Portfolio	19,997,747	14,232,833	6,163,714	11,199,660	1.22	14.1%
Divco West Fund VI	2020	Non-Core Portfolio	17,000,000	8,610,241	277,567	8,122,454	0.98	-2.1%
DRA Growth & Income Fund X	2020	Non-Core Portfolio	13,000,000	11,448,895	3,199,242	11,130,118	1.25	22.3%
ElmTree Net Lease Fund IV	2020	Non-Core Portfolio	14,000,000	8,966,450	11,924,544	(472,842)	1.28	20.9%
GreenOak Asia III (USD Vehicle)	2020	Non-Core Portfolio	14,000,000	14,561,678	8,421,922	7,517,444	1.09	12.6%
CIREP Centre Street, L.P.	2021	Non-Core Portfolio	30,000,000	19,705,883	-	23,782,362	1.21	19.2%
Exeter Industrial Value Fund V	2021	Non-Core Portfolio	10,000,000	9,846,353	-	14,753,472	1.50	31.7%
KKR Real Estate Partners Americas III	2021	Non-Core Portfolio	42,000,000	24,995,064	1,896,557	23,262,358	1.01	0.6%
KKR Real Estate Partners Europe II	2021	Non-Core Portfolio	17,650,000	12,691,756	4,007,355	9,971,815	1.10	9.1%
KKR Real Estate Securities Dislocation Opportunity Co-Investmen	2021	Non-Core Portfolio	21,000,000	11,537,987	13,110,905	1,808,017	1.29	35.4%
LaSalle GPS Co-Investment Program - Non-Core	2021	Non-Core Portfolio	25,800,000	9,675,257	317,346	9,730,959	1.04	3.6%
PGIM Real Estate Capital VII (USD Feeder) SCSp	2021	Non-Core Portfolio	18,000,000	4,049,679	(932,418)	5,759,705	1.68	13.5%
Rialto Real Estate Fund IV	2021	Non-Core Portfolio	25,000,000	20,117,208	2,270,550	18,981,395	1.06	5.4%
Westbrook Real Estate Fund XI	2021	Non-Core Portfolio	10,000,000	5,269,848	2,628,343	3,649,244	1.19	21.7%
Almanac Realty Securities IX, L.P.	2022	Non-Core Portfolio	20,000,000	2,614,340	-	2,408,028	0.92	-9.5%
Artemis Real Estate Partners Healthcare Fund II	2022	Non-Core Portfolio	30,000,000	5,710,777	1,543,364	3,711,164	0.92	-11.9%
Brookfield Strategic Real Estate Partners IV	2022	Non-Core Portfolio	45,000,000	16,376,288	771,354	17,262,944	1.10	17.3%
Carlyle Realty Partners IX	2022	Non-Core Portfolio	45,000,000	4,397,590	-	3,350,135	0.76	-51.1%
CIREP Centre Street II	2022	Non-Core Portfolio	30,000,000	5,541,872	-	4,867,034	0.88	-19.3%
LBA Logistics Value Fund IX	2022	Non-Core Portfolio	25,000,000	6,730,769	-	6,074,181	0.90	-12.7%
TPG Real Estate Partners IV	2022	Non-Core Portfolio	41,000,000	2,594,492	-	1,870,147	0.72	-28.2%
Almanac Realty Securities IX Co-Investment	2023	Non-Core Portfolio	10,000,000	690,373	-	740,217	1.07	7.3%
Blackstone Real Estate Partners X	2023	Non-Core Portfolio	45,000,000	168,523	-	53,745	0.32	0.0%

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Alternative Assets Manager Performance Detail

Through March 31, 2023

STATE STREET

	Vintage Year	Original Commitment	Total Contributions	Total Distrubutions	Market Value	Total Value Multiple	Net IRR%
TOTAL INFRASTRUCTURE		668,816,427	373,070,019	134,021,978	358,886,682	1.3x	12.3%
TOTAL INFRASTRUCTURE INVESTMENTS							
Brookfield Infrastructure Fund II, L.P.	2013	15,000,000	13,473,867	14,043,732	12,846,212	2.0x	12.9%
Global Energy & Power Infrastructure Fund II	2014	10,000,000	10,907,448	10,817,939	3,346,466	1.3x	13.8%
IFM Global Infrastructure Fund	2014	10,000,000	13,351,525	6,068,588	19,971,599	2.0x	11.7%
KKR Global Infrastructure Investors II L.P.	2014	12,000,000	12,942,582	18,548,159	5,830,635	1.9x	18.4%
Actis Energy 4	2016	12,900,000	12,917,957	16,038,275	2,451,000	1.4x	14.0%
ASF VII Infrastructure L.P.	2016	15,000,000	11,646,693	4,526,402	12,495,432	1.5x	15.7%
Brookfield Infrastructure Fund III, L.P.	2016	19,000,000	14,850,225	5,191,860	15,777,198	1.4x	10.5%
Global Infrastructure Partners III-A/B, L.P.	2016	22,000,000	22,489,429	10,472,649	22,880,253	1.5x	10.4%
Axium Infrastructure North America (2017)	2017	15,220,450	15,918,095	4,735,268	17,013,622	1.4x	8.6%
EQT Infrastructure III (No.2) SCSp	2017	11,295,436	12,916,975	17,697,664	6,258,922	1.9x	20.9%
NYCRS EIG Energy Partners, L.P.	2017	15,300,000	9,317,658	5,342,351	5,459,774	1.2x	7.6%
Cardinal NR Sidecar Holdings L.P.	2018	2,060,000	2,073,914	684,856	3,244,302	1.9x	17.5%
EQT Infrastructure IV (No.2) USD SCSp	2018	20,000,000	18,344,440	3,194,790	20,602,182	1.3x	11.6%
Global Infrastructure Partners IV-A/B, L.P.	2018	24,700,000	18,919,302	111,842	20,140,740	1.1x	5.9%
KKR Global Infrastructure Investors III L.P.	2018	17,200,000	15,129,270	3,908,151	14,186,007	1.2x	8.8%
Ardian Infrastructure Fund V B	2019	15,112,423	10,456,999	404,117	12,441,819	1.2x	15.7%
Brookfield Infrastructure Fund IV Co-Investment (Snow)	2019	2,000,000	2,010,258	287,147	2,883,393	1.6x	15.5%
Brookfield Infrastructure Fund IV, L.P.	2019	21,000,000	19,959,005	4,257,529	21,298,678	1.3x	13.4%
Global Energy & Power Infrastructure Fund III, L.P.	2019	17,200,000	15,090,993	2,831,907	15,480,917	1.2x	13.4%
BIS NYC Infrastructure Emerging Manager Opportunities Fund, L.P.	2020	14,980,000	3,484,669	-	3,674,143	1.1x	5.6%
EQT Infrastructure IV Co-Investment (B) SCSp (Saber)	2020	1,800,000	1,818,000	109,250	2,228,897	1.2x	8.9%
EQT Infrastructure IV Co-Investment (F) SCSp (Connect)	2020	3,700,000	3,369,846	-	5,720,850	1.7x	28.1%
EQT Infrastructure IV Co-Investment (G) SCSp (Lightspeed)	2020	3,068,600	3,078,707	-	4,008,549	1.3x	10.2%
EQT Infrastructure V (No.2) USD SCSp	2020	40,000,000	28,464,588	2,924,578	27,910,912	1.1x	9.0%
ASF VIII Infrastructure B L.P.	2021	32,000,000	3,706,522	659,268	3,450,880	1.1x	11.9%
Axium Infrastructure North America (2021)	2021	23,224,005	23,695,535	761,435	23,890,497	1.0x	8.6%
KKR Global Infrastructure Investors IV (USD) SCSp	2021	35,000,000	14,696,238	185,486	13,754,693	0.9x	-8.5%
Stonepeak Infrastructure Fund IV, L.P.	2021	35,000,000	15,433,317	98,950	16,773,781	1.1x	9.1%
Stonepeak Patagonia (Co-Invest) Holdings LP (Project Panther)	2021	5,661,000	5,107,725	-	5,923,071	1.2x	24.6%

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2023

	Vintage Year	Original Commitment	Total Contributions	Total Distrubutions	Market Value	Total Value Multiple	Net IRR%
Stonepeak Tiger (Co-Invest) Holdings (I-B) LP	2021	4,000,000	3,384,224	-	3,415,543	1.0x	0.6%
Ardian Infra Fund V Co-Invest Eden	2022	3,597,889	3,597,889	-	4,015,591	NM	NM
Ardian Infra Fund V Co-Invest Lemon	2022	2,767,352	2,514,917	-	2,573,630	NM	NM
Basalt Infrastructure Partners IV A L.P.	2022	26,600,000	-	-	-	NM	NM
Blackrock Global Infrastructure Fund IV	2022	25,000,000	1,640,515	-	1,405,212	NM	NM
Brookfield Infrastructure Fund V, LP	2022	26,580,000	-	-	(184,727)	NM	NM
DIF Infrastructure VII SCSp	2022	27,168,745	-	-	(360,541)	NM	NM
InfraVia European Fund V SCSp	2022	23,860,527	6,360,691	119,786	6,076,548	NM	NM
NYCRS EIG Energy Partners Co-Investment, L.P.	2022	3,820,000	-	-	-	-	0.0%
EQT Infrastructure VI (No.2) USD SCSp	2023	27,000,000	-	-	-	NM	NM
Global Infrastructure Partners V-A/B, L.P.	2023	27,000,000	-	-	-	NM	NM

Information provided by the New York City Fire Retirement System Consultants

Alternative Assets Manager Performance Detail

Through June 30, 2023

	Vintage Year	Commitment - Closing (Base)	Contributions Cumulative (Local)	Distributions Cumulative	Final Market Value	3 Month Base%	Inception IRR%
TOTAL OPPORTUNISTIC FIXED INCOME		877,540,906	910,184,975	477,479,689	740,325,048	0.66%	7.15%
Avenue Special Situations Fund V, L.P.	2007	5,052,332	5,130,079	6,706,716	-		10.89%
Avenue Europe Special Sit. Fund, L.P.	2008	4,863,574	4,495,867	8,970,029	-		15.01%
PIMCO DiSCO Fund, L.P.	2008	25,000,000	25,071,292	34,076,267	-		11.23%
Torchlight Debt Opportunity Fund III, LLC	2009	15,000,000	15,991,888	23,792,157	-		13.36%
Avenue Special Situations Fund VI (A), L.P.	2011	15,000,000	15,378,545	15,538,971	1,515,901	0.00%	2.17%
GoldenTree Managed Account	2011	32,000,000	32,200,730	-	58,049,491	0.50%	5.79%
Marathon Centre Street Partnership, L.P. - Asset Class	2011	46,875,000	89,953,125	51,046,875	72,591,950	0.50%	5.80%
AG Centre Street Partnership, L.P. - CC Asset Class	2012	35,000,000	42,365,358	9,260,636	47,740,830	2.41%	4.54%
Apollo Centre Street Partnership,L.P.	2012	63,333,333	136,803,473	86,783,341	80,523,599	1.06%	6.65%
FCO MA Centre Street L.P.	2012	30,000,000	60,171,710	63,744,182	19,658,536	0.00%	8.85%
OHA Centre Street Partnership, L.P.	2012	56,250,000	71,240,431	15,665,796	97,917,151	1.25%	8.10%
Contrarian Centre Street Partnership, L.P. - Asset Class	2013	15,000,000	15,000,000	-	17,518,823	0.04%	1.89%
Oaktree Opportunities Fund IX, L.P.	2013	30,000,000	30,000,000	27,020,313	24,675,310	0.00%	7.90%
Ares Centre Street Partnership, L.P.	2014	30,000,000	30,000,000	-	56,659,429	0.00%	8.84%
Brightwood Capital Fund III, L.P.	2015	8,000,000	6,492,299	6,536,125	2,406,724	0.00%	6.63%
Torchlight Debt Opportunity Fund V, LP	2015	20,000,000	16,000,000	19,168,979	1,842,843	1.52%	10.33%
Brightwood Capital Fund IV, LP	2016	20,000,000	20,000,000	8,119,296	18,020,194	0.00%	7.42%
ICG Centre Street Partnership, L.P.	2017	55,000,000	75,270,419	41,648,569	44,599,294	0.00%	8.65%
KKR OFI SMA	2017	55,000,000	42,576,115	12,380,804	42,428,041	0.00%	7.48%
Maranon Centre Street Partnership, L.P. -	2018	21,000,000	19,949,773	527,182	26,825,070	2.05%	8.53%
FCO MA Centre Street II (PF) LP	2019	30,000,000	44,707,423	28,159,647	22,621,072	0.00%	11.41%
Torchlight Debt Fund VI, LP -	2019	20,000,000	24,616,186	15,107,733	14,689,165	0.83%	8.37%
KKR-NYC Credit C L.P.	2020	10,416,667	7,332,856	368,879	6,848,532	0.00%	-0.96%
Marathon Centre Street Partnership, L.P. - Asset Class - Subsequent Commitment	2020	18,750,000	14,531,250	-	17,366,854	0.21%	8.72%
Torchlight Debt Fund VII, LP	2020	25,000,000	13,765,285	1,265,285	13,750,921	0.76%	5.93%
400 Capital Centre Street LP	2021	15,000,000	14,785,574	1,144,396	14,604,831	0.00%	4.93%
Centre Street CarVal Partnership LP	2022	36,000,000	9,000,000	-	9,550,095	1.84%	8.37%
GCM Grosvenor NYC EM OFI 2022-1	2022	40,000,000	4,134,755	32,738	4,076,241	0.00%	-1.37%
KLCP Domestic Fund III LP	2022	40,000,000	16,470,542	414,773	17,288,730	0.00%	10.03%
Napier Park Centre Street CLO Partnership Fund LP	2023	30,000,000	3,000,000	-	3,000,000		0.00%
Torchlight Debt Fund VIII, LP	2023	30,000,000	3,750,000	-	3,555,421	-0.71%	-26.05%

Information provided by Alpha Frontier
Above data is not final and subject to change

Alternative Assets Manager Performance Detail

Through June 30, 2023

STATE STREET

	Market Value	MTD Return%	3 Month Return%	FYTD Return%	YTD Return%	1 Year Return%	3 Year Return%	ITD Return%	ITD Cumulative Return%
TOTAL HEDGE FUNDS	951,478,278	1.35%	2.32%	2.71%	0.79%	2.71%	5.18%	4.68%	73.12%
TOTAL DIRECT HEDGE FUNDS	951,478,278	1.35%	2.32%	2.71%	0.79%	2.71%	5.18%	5.29%	81.67%
FUND OF FUNDS HEDGE FUNDS	-	0.00%		0.00%	0.00%		-8.23%	-1.38%	-14.01%
TOTAL DIRECT HEDGE FUNDS									
D.E. Shaw Composite Fund, L.L.C.	121,163,477	1.87%	2.92%	11.01%	4.09%	11.01%	19.44%	14.80%	388.86%
Voloridge Fund, LP	44,636,533	3.69%	5.44%	5.80%	1.38%	5.80%	7.30%	14.31%	78.55%
Voloridge Trading Aggressive Fund, LP	9,234,257	6.23%	7.29%	27.61%	14.77%	27.61%	18.15%	22.16%	138.09%
Relative Value	175,034,266	2.55%	3.77%	10.54%	3.89%	10.54%	16.12%	13.04%	309.50%
AlphaQuest Original LLC	69,319,413	0.25%	0.46%	-11.24%	-11.04%	-11.24%	4.64%	5.68%	39.95%
Brevan Howard Special Opportunities AC Fund Limited	7,366,167	0.84%	1.23%	-26.17%	0.82%	-26.17%		-26.17%	-26.17%
Florin Court Capital Fund	62,827,512	-0.67%	5.85%	3.84%	-0.48%	3.84%	17.89%	13.99%	90.39%
Gemsstock Fund LP	35,550,181	2.73%	0.90%	-11.12%	-14.53%			-11.12%	-11.12%
GreshamQuant - ACAR Fund, LLC	56,540,461	-7.40%	2.46%	-1.76%	1.44%	-1.76%	21.24%	16.23%	82.51%
Key Square Partners LP	32,594,936	0.09%	-2.50%	5.31%	-1.46%	5.31%	6.15%	0.44%	2.74%
Pharo Gaia Fund, LTD.	52,174,022	5.10%	5.22%	1.02%	3.56%	1.02%	-5.43%	4.07%	35.31%
Pharo Macro Fund, Ltd.	42,248,933	1.81%	2.61%	2.91%	1.09%	2.91%	-0.49%	5.08%	64.12%
Tactical Trading	358,621,625	-0.12%	2.23%	-5.57%	-3.09%	-5.57%	2.94%	3.60%	50.59%
Caspian Select Credit Fund, L.P.	30,512,906	2.78%	3.61%	7.96%	8.27%	7.96%	7.23%	4.14%	57.24%
DL Partners Opportunities Fund LP	43,095,347	1.90%	0.80%	-0.85%	0.79%	-0.85%	3.01%	1.88%	9.10%
Luxor Capital Partners Liquidating SPV, LLC.	842,720	-1.59%	-1.67%	1.64%	-1.79%	1.64%	6.73%	-0.23%	-1.09%
Luxor Capital Partners, LP	37,086,002	0.27%	-3.67%	-13.69%	-12.30%	-13.69%	-16.35%	-2.02%	-16.93%
Standard General Fund II L.P.	9,389,674	3.30%	-5.37%	-35.86%	-26.14%	-35.86%	-4.96%	-3.65%	-21.25%
Event Driven	120,926,649	1.69%	-0.46%	-7.50%	-4.88%	-7.50%	-4.75%	1.49%	17.91%
Altimeter Partners Fund LP	22,285,088	3.52%	18.44%	7.49%	37.00%	7.49%	-4.18%	3.36%	27.42%
Caledonia Fund (US), L.P.	26,930,613	2.07%	1.06%	40.82%	19.27%	40.82%		-12.78%	-23.06%
Kontiki Onshore Fund	56,301,326	4.33%	-1.66%	6.15%	-0.06%	6.15%		11.58%	12.60%
Maple Rock US Fund LP	38,614,418	-3.46%		-3.46%	-3.46%			-3.46%	-3.46%
SRS Partners US, LP	83,208,733	4.42%	7.97%	32.03%	10.75%	32.03%	23.42%	11.46%	151.42%
Turiya Fund LP	69,555,560	1.47%	-0.57%	13.08%	3.80%	13.08%	15.46%	5.89%	58.05%
Long/Short Equity	296,895,737	2.34%	2.49%	17.72%	7.85%	17.72%	9.77%	5.26%	66.99%
FUND OF FUNDS HEDGE FUNDS									
Fund of Funds Hedge Funds	-	0.00%		0.00%	0.00%		-8.23%	-1.38%	-14.01%

Information provided by Alpha Frontier

Appendix D

Footnotes

Glossary of Terms

Through June 30, 2023

STATE STREET

General Notes

- Estimated management fees for public market investments are calculated on an accrual basis without adjustment for management fee caps. Alternative investment (Private Market) fees are recorded on a cash basis and are not inclusive of carried interest paid. Since not all alternative managers currently provide detailed fee disclosure, the alternative investment fees noted here are not comprehensive.
- Returns greater than 1 year are annualized.
- Public Market returns are Net of Manager Fees for periods after January 2014 and Gross of investment advisory fees for other periods unless otherwise indicated.
- Public market excess returns for periods prior to 2014 are based on Gross performance.

Page Specific

Pages 7 - 12 - Portfolio Asset Allocation

- Rebalancing Ranges: the minimum and maximum weights that actual Asset Allocation may reach before rebalancing between Asset Classes is necessary.

Pages 13 - 15 - Performance Attribution: Total Plan

- Plan Return at Policy Weights: the return of the Total Plan assuming actual Asset Class results were maintained at target (Adjusted Policy) weights. *Figure = (Return of Asset Class 1* Target Weight) plus (Return Of Asset Class 2* Target Weight) plus (......)*

- **Allocation Effect =** Total Plan Return minus Plan Return At Adjusted Policy Weights. Allocation is the Contribution to Performance resulting from an overweight or underweight to an asset class. E.g. an underweight to an Asset Class that under-performs results in a positive Allocation Effect and vice versa.

- **Selection Effect** = Equal to the Custom Benchmark (Adjusted Policy Index) Return minus Plan Return at Adjusted Policy Weights. This illustrates how the Managers have added or removed value based on their Security Selection decisions, e.*g., If the manager's Actual Returns are higher than the Implied Return there will be a positive Selection Effect.*

- **Policy Index = Custom Benchmark**
  The "policy index" is a custom benchmark representing the weighted average return of the weighted benchmark indexes for each major investment program. Weights may reflect an adjustment of actual policy for outstanding commitments for new or revised programs, such as for private market programs, which are invested gradually, or for any new or updated program requiring the completion of RFPs

Glossary of Terms

Through June 30, 2023

STATE STREET

and contracts. The policy index/custom benchmark is calculated monthly based on adjusted policy weights at the beginning of each month.

The indexes and most recent policy weights are as follows:

*U.S. Equity: Russell 3000 * 27.19%*

*International Developed (EAFE) Markets: MSCI World ex USA IMI Net * 8.19%*

*International Active – Global: MSCI ACWI * 1.75%*

*Emerging Markets: MSCI Emerging Markets * 5.64%*

*International Emerging Managers FOF: MSCI ACWI Ex US IMI Net * 0.69%*

*REITs: Dow Jones Real Estate Securities * 0.00%*

*Private Equity: Russell 3000 + 300 b.p. per annum * 8.00%*

*Private Real Estate – Core: NFI - ODCE Net * 3.00%*

*Private Real Estate – Non Core: NFI - ODCE Net + 200bps * 2.39%*

*Infrastructure: CPI + 4% * 2.01%*

*Hedge Funds: HFRI Fund of Funds Composite Index plus 1% *5.00%*

*US Treasury Short Term: FTSE US Government Bond 1-3 Years Index * 4.16%*

*US Treasury Intermediate: USBIG TSY AGN 1-10 * 4.94%*

*Active Government: NYC Treasury Agency + 5 * 0.00%*

*US Treasury Long Duration: FTSE US Government Bond 10+ Years Index * 3.38%*

*Core FI-Developing Mgrs: Bloomberg U.S. Aggregate * 0.00%*

*Core FI-Emerging Mgrs: Bloomberg U.S. Aggregate * 0.00%*

Glossary of Terms

Through June 30, 2023

*Mortgage: Bloomberg US Mortgage Backed Securities * 4.63%*

*ETI: ETI Custom Benchmark * 0.59%*

*Investment Grade Corporate: NYC Custom IGC Benchmark * 4.18%*

*High Yield: Bloomberg U.S. HY - 2% Issuer Cap * 6.00%*

*Bank Loans: Credit Suisse Leveraged Loan * 0.00%*

*TIPS: Bloomberg Global Infl-Linked: U.S. TIPS * 4.25%*

*Convertible Bonds: ICE BofA All US Conv Ex Mandatory * 0.00%*

*Opportunistic Fixed: OFI - JPMGHY / CSFB 50/50 Blend Plus 300 b.p. per annum * 4.00%*

Page 16 – Allocation and Selection Effects - Asset Class Breakdown

- This chart aims to break down the Allocation and Selection Effects shown on the Performance Attribution pages. The aim of the Page is to show the asset classes where Managers are either out performing or under performing their benchmark and to show the basis point effect that this is having on Plan performance.

Footnotes

Through June 30, 2023

[1] NYC Developed Growth Benchmark: Beginning 8.2017 benchmark changed from MSCI EAFE Growth to MSCI World ex USA Net Index.
[2] NYC Developed Value Benchmark: Beginning 8.2017 benchmark changed from MSCI EAFE Value Net to MSCI World ex USA Net Index.
[3] NYC Custom World ex US Index: Beginning 2.2017 benchmark changed from MSCI EAFE to MSCI World ex USA Net Index.
[4] Name changed from SSGA MSCI EAFE Small Cap Index 12.2017
[5] World ex USA SC PASSIVE CUSTOM BM: Beginning 12.2017 benchmark changed from MSCI EAFE Small Cap Net to MSCI World ex US Small Cap (Net).
[6] NYC Custom IGC Benchmark: Beginning 3.2021 benchmark changed from NYC - Investment Grade Credit to Bloomberg U.S. Corporate Inv Grade.
[7] NYC Custom Mortgage Benchmark: Beginning 9.2020 benchmark changed from FTSE Mortgage Index to Bloomberg US Mortgage Backed Securities.
[8] Assets were in transition from 9/29/17 to 2/11/19
[9] Assets were in transition from 9/29/17 to 11/30/17

ETI Quarterly Report (Public):

Fire Pension Fund - Economically Targeted Investments Quarterly Report

Public/Private Apartment Rehabilitation Program (PPAR)

Lenders	Bank of America		Citi Community Development		Carver Federal Savings Bank		The Community Preservation Corp		JP Morgan Chase		Low Income Investment Fund		NCB Capital Impact *		Neighborhood Housing Service		Wells Fargo		Local Initiatives Support Corp		Enterprise Cmty Loan Fund		NYC HDC	
Contractual Commitment	$11.00		$6.00		$1.00		$6.00		$10.00		$6.00		$0.00		$1.00		$3.00		$7.00		$7.00		$5.00	
Current Market Value	$1.35		$3.42		$0.35		$2.56		$5.82		$2.66		$0.21		$0.00		$1.16		$2.93		$1.23		$0.00	
	Dollars	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**	**Dollars**	**Units**
Commitments Q2 (included in total)																								
Bronx	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.35	75	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0
Brooklyn	0.00	0	0.00	0	0.00	0	0.01	6	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Manhattan	0.00	0	0.00	0	0.00	0	0.02	28	0.00	0	1.13	207	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.03**	**34**	**$0.00**	**0**	**$1.48**	**282**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**
Delivered Q2 (included in total)																								
Bronx	$0.00	0	$0.00	0	$0.00	0	$0.06	52	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0	$0.00	0
Brooklyn	0.00	0	0.00	0	0.00	0	0.04	50	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Manhattan	0.00	0	0.00	0	0.00	0	0.02	18	0.03	13	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.06	73	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.18**	**193**	**$0.03**	**13**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**
Total Commitments																								
Bronx	$0.00	0	$0.00	0	$0.00	0	$0.78	954	$0.75	121	$0.35	75	$0.00	0	$0.00	0	$0.00	0	$1.84	90	$0.75	101	$0.00	0
Brooklyn	0.00	0	0.16	0	0.00	0	0.21	215	0.00	0	0.26	95	0.00	0	0.00	0	0.00	0	0.59	74	0.00	0	0.00	0
Manhattan	0.00	0	0.00	0	0.00	0	0.33	561	0.22	84	1.39	289	0.00	0	0.00	0	0.00	0	1.58	113	0.32	26	0.00	0
Queens	0.00	0	0.00	0	0.00	0	0.09	120	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Outside of NYC	0.00	0	0.00	0	0.00	0	0.31	253	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	**$0.00**	**0**	**$0.16**	**0**	**$0.00**	**0**	**$1.72**	**2,103**	**$0.97**	**205**	**$2.00**	**459**	**$0.00**	**0**	**$0.00**	**0**	**$0.00**	**0**	**$4.02**	**277**	**$1.07**	**127**	**$0.00**	**0**
Historical Investments																								
Bronx	$0.61	60	$2.14	802	$0.00	0	$1.10	2,030	$4.98	1,733	$0.74	178	$0.00	0	$0.00	0	$0.17	90	$0.75	48	$0.00	0	$0.00	0
Brooklyn	0.65	54	1.42	481	0.00	0	1.15	1,868	0.56	226	1.20	401	0.00	0	0.00	0	0.37	130	1.09	82	1.46	360	0.00	0
Manhattan	0.78	100	0.56	283	0.54	236	0.63	1,371	0.58	346	1.98	498	0.27	123	0.00	0	0.72	203	1.44	65	0.00	0	0.00	0
Queens	1.97	293	0.12	54	0.00	0	0.10	120	0.46	164	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Staten Island	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.05	67	0.00	0	0.00	0	0.00	0
Outside of NYC	0.21	39	0.32	41	0.00	0	0.64	797	0.63	197	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total	**$4.22**	**546**	**$4.55**	**1,661**	**$0.54**	**236**	**$3.62**	**6,186**	**$7.20**	**2,666**	**$3.93**	**1,077**	**$0.27**	**123**	**$0.00**	**0**	**$1.32**	**490**	**$3.28**	**195**	**$1.46**	**360**	**$0.00**	**0**

Note: Dollar amount listed in millions

* NCB Capital Impact's Buy-Sell Agreement terminated effective 7/29/2014.

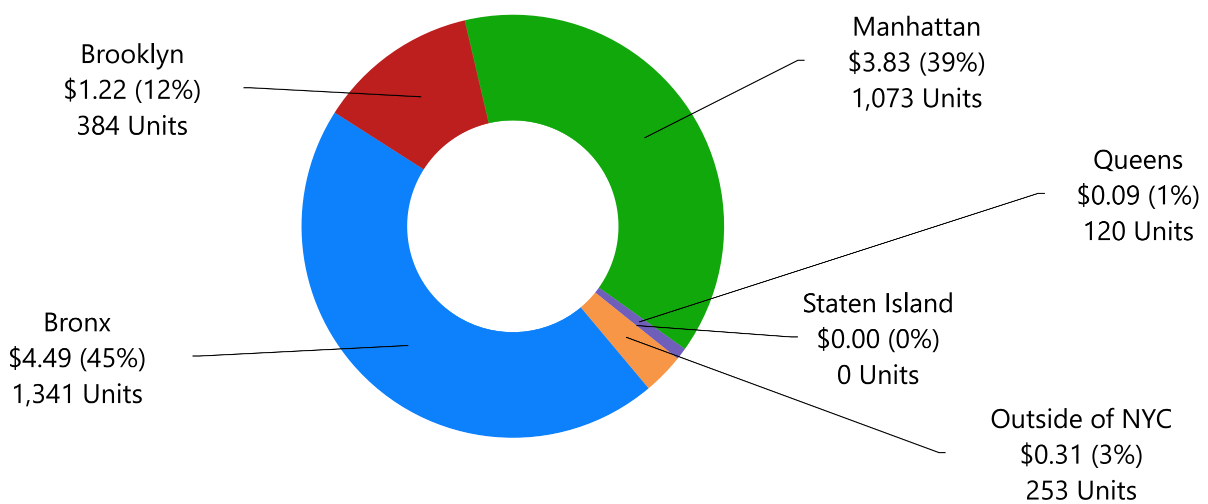
Fire Pension Fund - Economically Targeted Investments Quarterly Report

Public/Private Apartment Rehabilitation Program (PPAR)

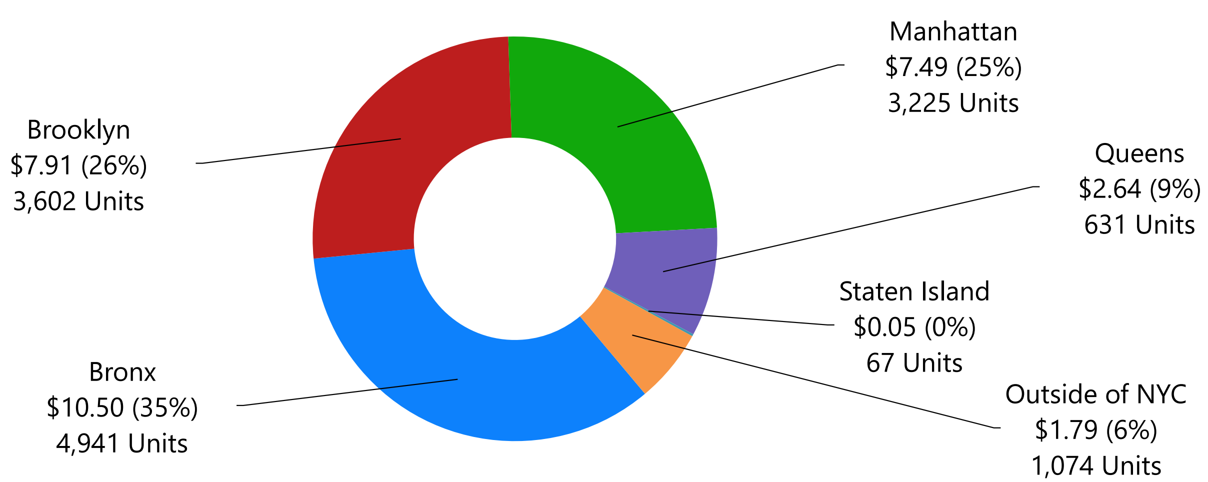
Lenders	All Lender Totals	
Contractual Commitment	$63.00	
Current Market Value	$21.69	
	Dollars	**Units**
Commitments Q2 (included in total)		
Bronx	$0.35	75
Brooklyn	0.01	6
Manhattan	1.15	235
Queens	0.00	0
Staten Island	0.00	0
Outside of NYC	0.00	0
Total	**$1.51**	**316**
Delivered Q2 (included in total)		
Bronx	$0.06	52
Brooklyn	0.04	50
Manhattan	0.05	31
Queens	0.00	0
Staten Island	0.00	0
Outside of NYC	0.06	73
Total	**$0.21**	**206**
Total Commitments		
Bronx	$4.49	1,341
Brooklyn	1.22	384
Manhattan	3.83	1,073
Queens	0.09	120
Staten Island	0.00	0
Outside of NYC	0.31	253
Total	**$9.94**	**3,171**
Historical Investments		
Bronx	$10.50	4,941
Brooklyn	7.91	3,602
Manhattan	7.49	3,225
Queens	2.64	631
Staten Island	0.05	67
Outside of NYC	1.79	1,074
Total	**$30.38**	**13,540**

Note: Dollar amount listed in millions

Current Commitments All PPAR Lenders



Historical Investments Since Inception All PPAR Lenders



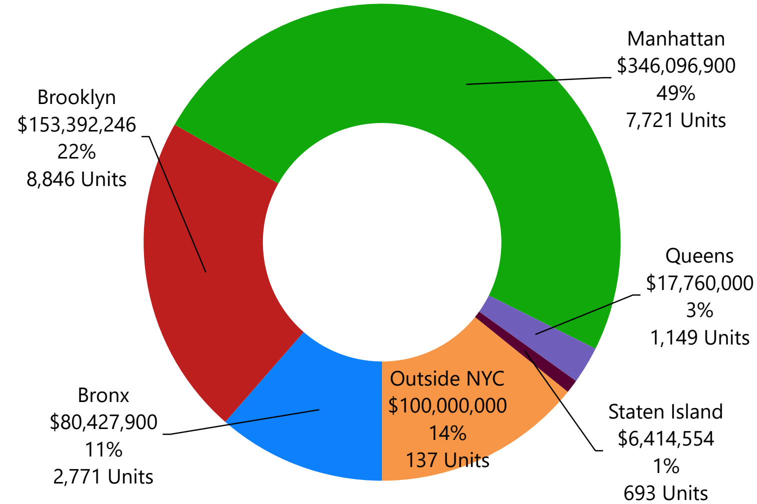
Fire Pension Fund - Economically Targeted Investments Quarterly Report

AFL-CIO Housing Investment Trust (HIT)
Market Value $55.44 million[1]

NYC Community Investment Initiative (NYCCII)

Borough	NYCCII Phase I: 2002 - 2005 Investments	Units[2]	NYCCII Phase II: 2006 - 2013 Investments	Units[2]	Grand Total Investments	Units[2]
Bronx	$27,600,000	2,010	$52,827,900	761	$80,427,900	2,771
Brooklyn	49,501,800	3,230	103,890,446	5,616	153,392,246	8,846
Manhattan	172,021,700	6,908	174,075,200	813	346,096,900	7,721
Queens	0	0	17,760,000	1,149	17,760,000	1,149
Staten Island	0	0	6,414,554	693	6,414,554	693
Outside NYC	0	0	100,000,000	137	100,000,000	137
Total	**$249,123,500**	**12,148**	**$454,968,100**	**9,169**	**$704,091,600**	**21,317**

NYCCII Multifamily Program

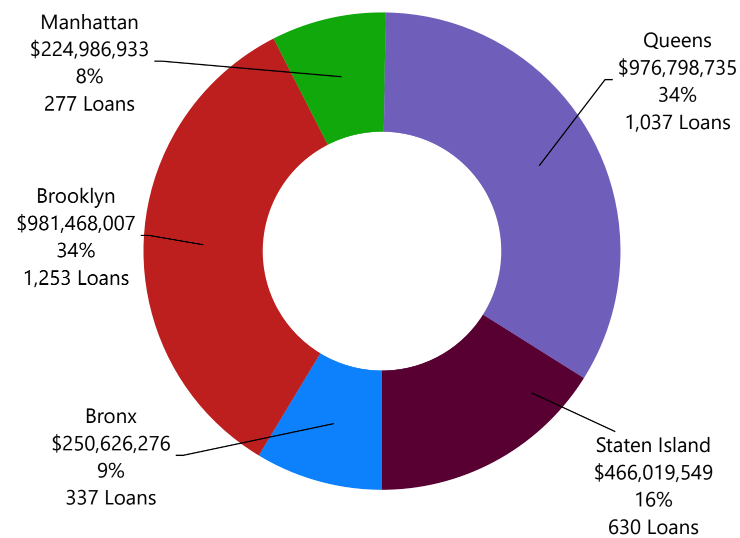


HIT Home Mortgage Program

Borough	NYCCII Phase I: 2002 - 2005 $ Amount	Loans	NYCCII Phase II: 2006 - 2013 $ Amount	Loans	Grand Total $ Amount	Loans
Bronx	$32,544,168	41	$218,082,108	296	$250,626,276	337
Brooklyn	116,575,736	138	864,892,271	1,115	981,468,007	1,253
Manhattan	10,742,253	12	214,244,680	265	224,986,933	277
Queens	82,399,317	64	894,399,418	973	976,798,735	1,037
Staten Island	106,039,089	191	359,980,460	439	466,019,549	630
Total	**$348,300,563**	**446**	**$2,551,598,937**	**3,088**	**$2,899,899,500**	**3,534**

FIRE Loans	Phase I:	48	Phase II:	133	Total:	181

Home Mortgage Program



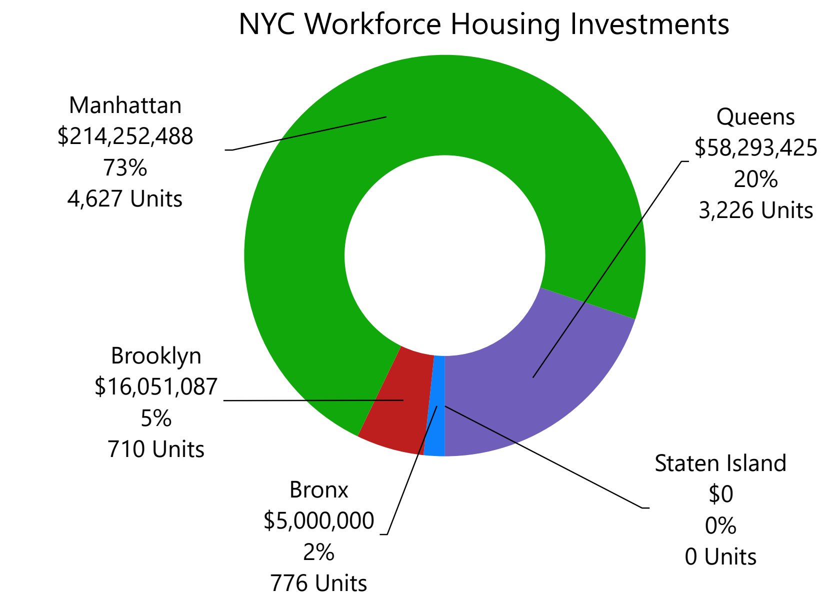
[1]Interest is reinvested
[2]Low/Moderate Income Units

Fire Pension Fund - Economically Targeted Investments Quarterly Report

AFL-CIO Housing Investment Trust (HIT)

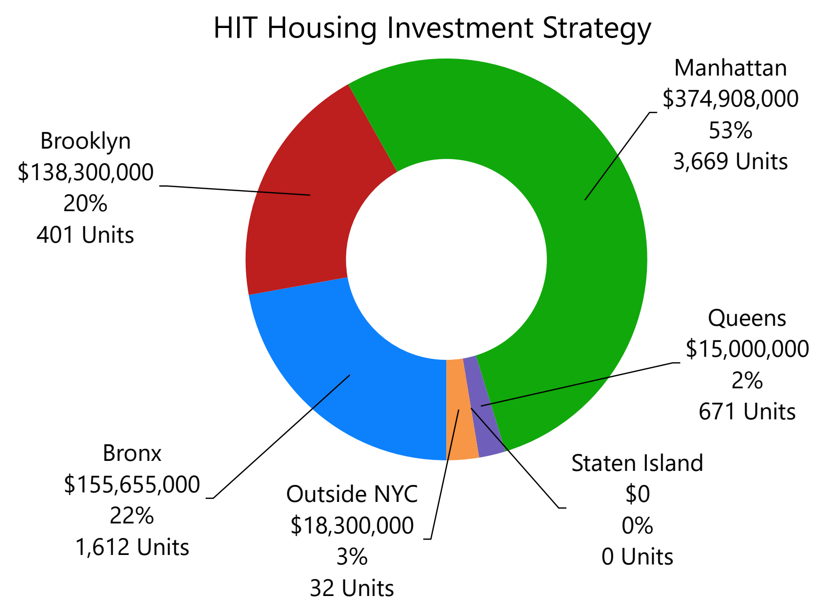
NYC Workforce Housing Investments: 2009 - 2015

Borough	Investments Since Inception	LMI Units Since Inception
Bronx	$5,000,000	776
Brooklyn	16,051,087	710
Manhattan	214,252,488	4,627
Queens	58,293,425	3,226
Staten Island	0	0
Total	**$293,597,000**	**9,339**



HIT Housing Investment Strategy: 2015 - Q2 2023

Borough	Q2 Investments	Investments Since Inception	Q2 Units	LMI Units Since Inception
Bronx	$0	$155,655,000	0	1,612
Brooklyn	0	138,300,000	0	401
Manhattan	93,650,000	374,908,000	234	3,669
Queens	0	15,000,000	0	671
Staten Island	0	0	0	0
Outside NYC	0	18,300,000	0	32
Total	**$93,650,000**	**$702,163,000**	**234**	**6,385**



Fire Pension Fund - Economically Targeted Investments Quarterly Report

RBC ACCESS CAPITAL STRATEGIES (Since Inception 2/1/07)

$28.5 million Allocated (6.33% of total account)
Market Value $25.57 million

Multifamily Investments Detail	$ Invested[1]		Units[2]	
	Q2	Total	Q2	Total
Bronx	$64,883	$9,023,028	180	20,149
Brooklyn	0	5,101,772	0	15,373
Manhattan	0	7,943,164	0	7,281
Queens	0	1,365,089	0	920
Staten Island	0	352,718	0	75
Total FIRE Multifamily Investments	**$64,883**	**$23,785,771**	**180**	**43,798**
Multifamily Total All Systems	**$1,025,000**	**$375,762,572**	**180**	**43,798**

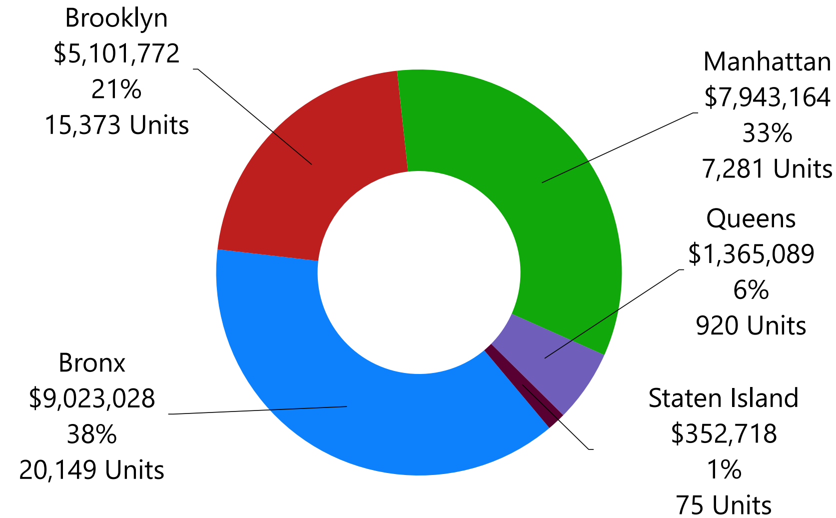
Single Family Investments Detail	$ Invested		Units	
	Q2	Total	Q2	Total
Bronx	$74,325	$4,695,148	2	322
Brooklyn	84,212	11,743,700	3	731
Manhattan	0	1,031,814	0	65
Queens	222,959	18,118,211	7	1,052
Staten Island	267,146	12,153,557	10	709
Total FIRE Single Family Investments	**$648,643**	**$47,742,430**	**22**	**2,879**
Single Family Total All Systems	**$10,247,120**	**$754,224,803**	**22**	**2,879**

Other Investments Detail	$ Invested		Loans	
	Q2	Total	Q2	Total
Bronx	$0	$42,728	0	1
Brooklyn	0	341,212	0	8
Manhattan	0	154,003	0	5
Queens	0	34,399	0	3
Staten Island	0	0	0	0
Total FIRE Other Investments	**$0**	**$572,342**	**0**	**17**
Other Investments Total All Systems	**$0**	**$9,041,740**	**0**	**17**

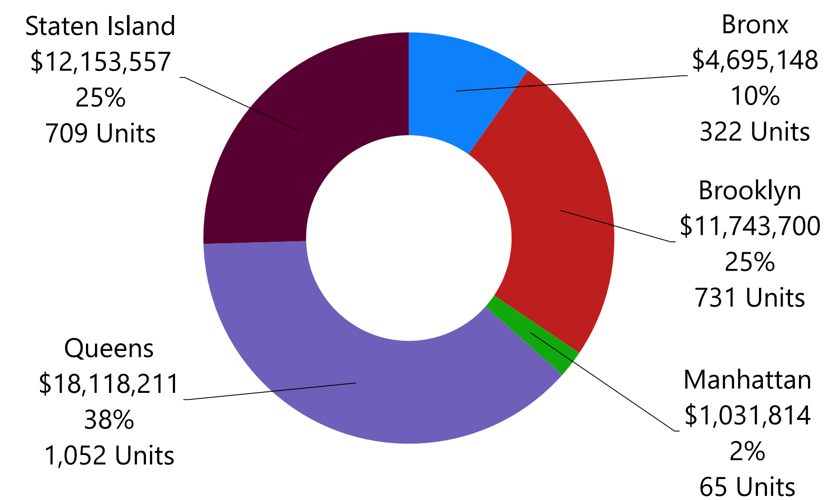
Grand Total FIRE	**$713,525**	**$72,100,543**
Grand Total All Systems	**$11,272,120**	**$1,139,029,115**

[1] Certain bond investment amounts are allocated pro rata across boroughs based upon unit count.
[2] If not indicated otherwise, superintendent units are allocated based on building size.

RBC Access Multifamily Investments Since Inception



RBC Access Single Family Investments Since Inception



Fire Pension Fund - Economically Targeted Investments Quarterly Report

ETI Real Estate Equity Investments

Total Market Value $12.65 million

Hudson
Market Value $3.98 million

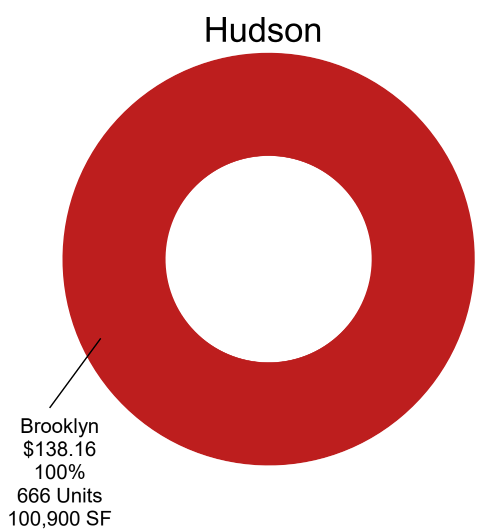
Borough	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
Bronx	$0.00	0	0	0
Brooklyn	138.16	666	666	100,900
Manhattan	0.00	0	0	0
Queens	0.00	0	0	0
Staten Island	0.00	0	0	0
Outside NYC	0.00	0	0	0
Totals	**$138.16**	**666**	**666**	**100,900**

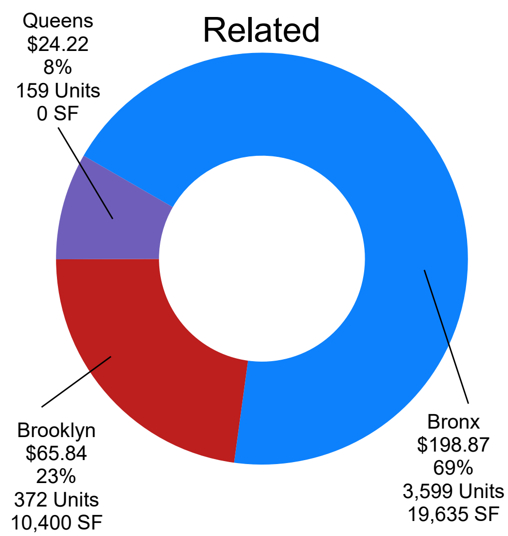
Related
Market Value $5.57 million

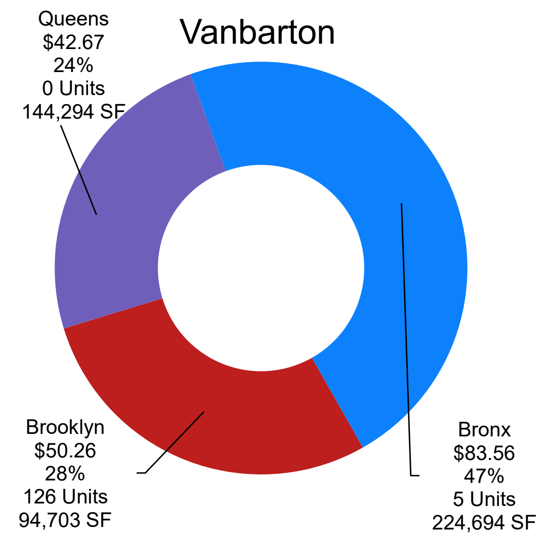
Borough	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
Bronx	$198.87	3,599	3,356	19,635
Brooklyn	65.84	372	212	10,400
Manhattan	0.00	0	0	0
Queens	24.22	159	151	0
Staten Island	0.00	0	0	0
Outside NYC	0.00	0	0	0
Totals	**$288.93**	**4,130**	**3,719**	**30,035**

Vanbarton (Emmes)
Market Value $3.11 million

Borough	Gross Capital Invested	Total Units	Workforce Units	Comm. SF
Bronx	$83.56	5	2	224,694
Brooklyn	50.26	126	61	94,703
Manhattan	0.00	0	0	0
Queens	42.67	0	0	144,294
Staten Island	0.00	0	0	0
Outside NYC	0.00	0	0	0
Totals	**$176.49**	**131**	**63**	**463,691**







*All information is derived from reports submitted by individual managers and State Street Bank, and is reported on a quarter lag. Performance has not been reviewed by consultants or custodial bank.

**Dollar amounts listed in millions.

Private Equity Quarterly Report (Public):

PRIVATE EQUITY MONITORING REPORT

For the period ended March 31, 2023

Prepared at the Specific Request of:

Client:

New York City Fire Pension Fund

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All data is as of March 31, 2023 unless otherwise noted. **PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. ACTUAL PERFORMANCE MAY VARY.**

EXECUTIVE SUMMARY

As of March 31, 2023. In USD millions.

	INCEPTION TO MARCH 31, 2023	INCEPTION TO DECEMBER 31, 2022	INCEPTION TO MARCH 31, 2022	QUARTERLY CHANGE	ANNUAL CHANGE
Number of Managers	132	132	128	0	4
Number of Investments	293	286	267	7	26
Committed Capital	$3,419.3	$3,304.9	$3,002.6	$114.4	$416.7
Contributed Capital	2,706.6	2,658.6	2,442.8	48.0	263.8
Distributed Capital	2,629.0	2,589.0	2,443.9	40.0	185.1
Market Value	1,708.8	1,662.9	1,646.4	45.9	62.4
Total Value	4,337.8	4,251.9	4,090.2	85.9	247.6
Total Gain/(Loss)	1,631.2	1,593.3	1,647.4	37.9	(16.2)
Unfunded Commitment	1,019.3	947.3	847.7	72.1	171.7
Total Exposure	2,728.1	2,610.2	2,494.0	118.0	234.1
DPI	1.0x	1.0x	1.0x	0.0x	0.0x
TVM	1.6x	1.6x	1.7x	0.0x	-0.1x
IRR	12.3%	12.4%	13.1%	(3 bps)	(71 bps)
TVM Net of StepStone Fees	1.6x	1.6x	1.7x	0.0x	(0.1x)
IRR Net of StepStone Fees	12.3%	12.3%	13.0%	(3 bps)	(71 bps)

IRR and TVM for certain vehicles may have been impacted by StepStone's or the underlying GPs' use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital. Unless otherwise indicated, all underlying investment attribution and performance information presented is net of fees and expenses charged by the underlying investment, but gross of StepStone vehicle/account fees and expenses. Where indicated, net return figures presented for StepStone vehicle/account performance include fees and expenses paid to StepStone.

PERIODIC RETURNS VS. Russell 3000® INDEX

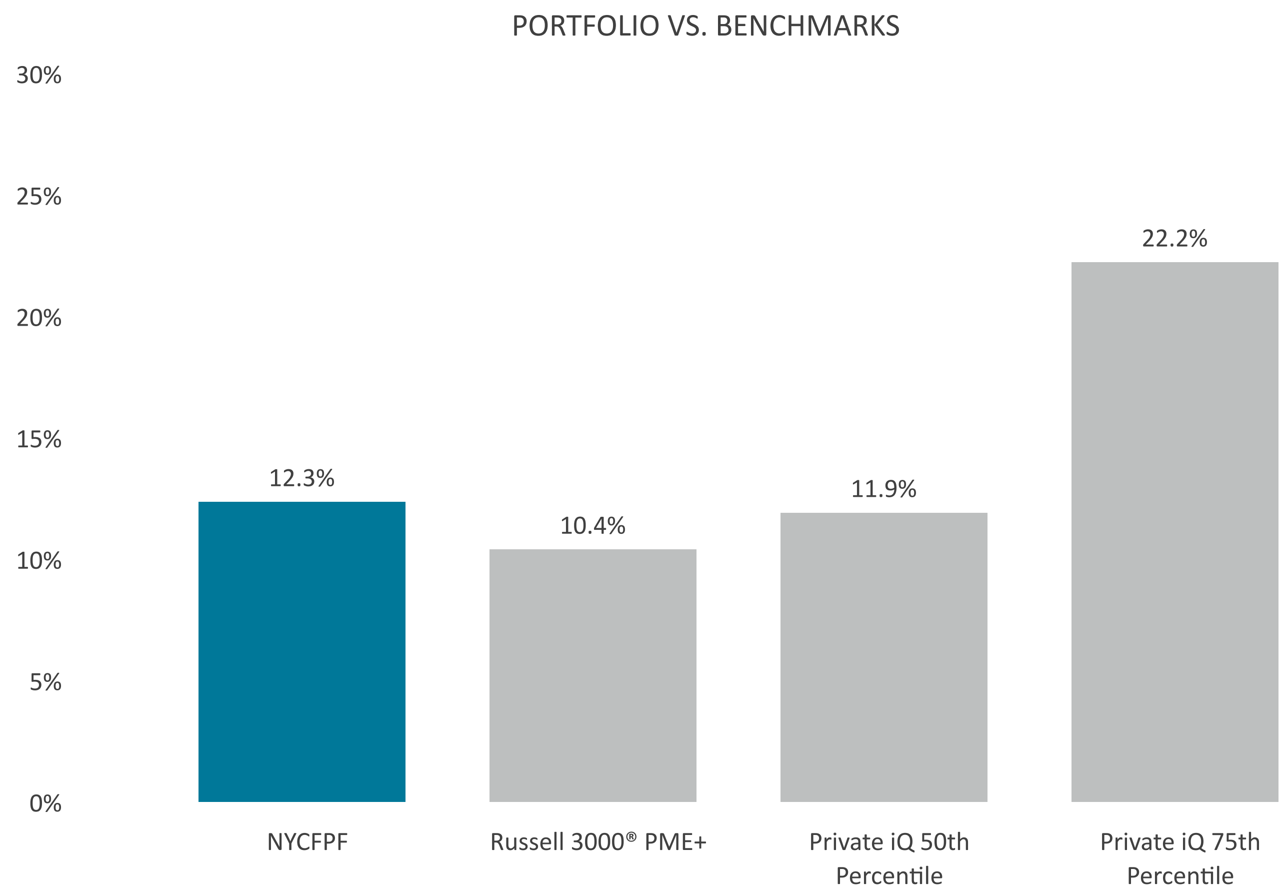
As of March 31, 2023. In USD millions.

INDEX	3-MONTH IRR	1-YEAR IRR	3-YEAR IRR	5-YEAR IRR	10-YEAR IRR	INCEPTION IRR
NYCFPF IRR	2.3%	-1.0%	23.1%	15.3%	14.2%	12.3%
RUSSELL 3000®	7.3%	-7.6%	17.7%	10.3%	11.8%	10.4%
RUSSELL 3000® + 300 bps	10.3%	-4.6%	20.7%	13.3%	14.8%	13.4%
NYCFPF OUTPERFORMANCE/(UNDERPERFORMANCE)						
VS. RUSSELL 3000® + 300 bps	-8.0%	3.6%	2.3%	2.0%	-0.6%	-1.0%

The referenced indices/benchmarks are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

PERFORMANCE SUMMARY CONTINUED

The following table illustrates the Portfolio's point-to-point investment performance as of March 31, 2023, the public market equivalent (PME+) based on the Russell 3000 (TR) index and the Burgiss 50th and 75th percentiles.



Return is a dollar-weighted PME+ calculation of daily changes in the Russell 3000® Index. Russell Investment Group is the source and owner of the trademark, service marks and copyrights related to the Russell Indexes. Russell® is a trademark of Russell Investment Group.

Private iQ benchmark reflects Equity (all sub-sectors), Mezzanine, Distressed, Oil & Gas Assets asset classes, 50th percentile, or median, IRR at March 31, 2023 for funds with vintage years from 1998 through 2023. Note: Data may be subject to change.

Private iQ benchmark reflects Equity (all sub-sectors), Mezzanine, Distressed, Oil & Gas Assets asset classes, 75th percentile, or median, IRR at March 31, 2023 for funds with vintage years from 1998 through 2023. Note: Data may be subject to change.

The referenced indices are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

PORTFOLIO DIVERSIFICATION BY STRATEGY/SUB-STRATEGY

As of March 31, 2023. In USD millions.

STRATEGY	MARKET VALUE	% OF TOTAL	UNFUNDED	% OF TOTAL	EXPOSURE	% OF TOTAL
Buyout	**$1,035.6**	**60.6%**	**$598.0**	**58.7%**	**$1,633.6**	**59.9%**
Mega Buyout	$506.8	29.7%	$323.4	31.7%	$830.2	30.4%
Large Buyout	$313.6	18.4%	$206.5	20.3%	$520.1	19.1%
Middle-Market Buyout	$159.6	9.3%	$53.5	5.3%	$213.1	7.8%
Small Buyout	$55.6	3.3%	$14.6	1.4%	$70.2	2.6%
Special Situations	**$257.4**	**15.1%**	**$157.2**	**15.4%**	**$414.6**	**15.2%**
Growth Equity	**$235.4**	**13.8%**	**$118.3**	**11.6%**	**$353.8**	**13.0%**
Secondaries	**$121.9**	**7.1%**	**$105.8**	**10.4%**	**$227.7**	**8.3%**
Multi-Strategy	**$40.5**	**2.4%**	**$38.6**	**3.8%**	**$79.1**	**2.9%**
Co-Investment	$20.8	1.2%	$18.1	1.8%	$38.9	1.4%
Diversified	$11.7	0.7%	$16.6	1.6%	$28.3	1.0%
Funds	$8.1	0.5%	$3.9	0.4%	$12.0	0.4%
Other	**$17.9**	**1.1%**	**$1.3**	**0.1%**	**$19.3**	**0.7%**
Venture Capital	$16.7	1.0%	$0.4	0.0%	$17.1	0.6%
Mezzanine	$1.0	0.1%	$0.7	0.1%	$1.7	0.1%
Energy	$0.2	0.0%	$0.3	0.0%	$0.5	0.0%
Total	**$1,708.8**	**100.0%**	**$1,019.3**	**100.0%**	**$2,728.1**	**100.0%**

PORTFOLIO DIVERSIFICATION BY FUND GEOGRAPHIC FOCUS

As of March 31, 2023. In USD millions.

GEOGRAPHY	MARKET VALUE	% OF TOTAL	UNFUNDED	% OF TOTAL	EXPOSURE	% OF TOTAL
North America	$1,085.5	63.5%	$596.6	58.5%	$1,682.1	61.7%
Western Europe	$317.9	18.6%	$227.6	22.3%	$545.5	20.0%
Global	$294.4	17.2%	$178.3	17.5%	$472.7	17.3%
Rest of World	$11.0	0.6%	$16.8	1.7%	$27.8	1.0%
Total	**$1,708.8**	**100.0%**	**$1,019.3**	**100.0%**	**$2,728.1**	**100.0%**

NEW INVESTMENT COMMITMENTS

As of March 31, 2023. In USD millions.

INVESTMENT	MONTH CLOSED	STRATEGY	GEOGRAPHIC FOCUS	COMMITTED CAPITAL
Bridgepoint Europe VII	February 2023	Buyout	Western Europe	$13.3
Bridgepoint Europe VII Co-Invest	February 2023	Buyout	Western Europe	$6.6
Valor Equity Partners VI, L.P.	February 2023	Growth Equity	North America	$12.5
Vista Co-Invest Fund 2022-4, L.P.	March 2023	Buyout	North America	$10.0
Vista Equity Partners Fund VIII, L.P.	March 2023	Buyout	North America	$30.0
Apollo Fund X NYC Sidecar Co-Invest, L.P.	March 2023	Special Situations	North America	$10.0
Apollo Investment Fund X, L.P.	March 2023	Special Situations	North America	$30.0
Total				**$112.4**

SUBSEQUENT INVESTMENT COMMITMENTS

Subsequent to March 31, 2023. In USD millions.

INVESTMENT	MONTH CLOSED	STRATEGY	GEOGRAPIC FOCUS	COMMITTED CAPITAL
ASF IX B L.P.	April 2023	Secondaries	Global	$16.8
ASF IX B NYC Co-Invest L.P.	April 2023	Secondaries	Global	$25.2
New 2ND Capital Fund III, L.P.	May 2023	Secondaries	North America	$3.0
New 2ND Capital N Sidecar, L.P.	May 2023	Secondaries	North America	$1.5
Clayton, Dubilier & Rice Fund XII, L.P.	May 2023	Buyout	Global	$40.0
Total				**$86.5**

STEPSTONE
inside private markets

PERFORMANCE BY VINTAGE YEAR

The following table illustrates the Portfolio's since inception investment performance by vintage year as of March 31, 2023 relative to the median quartile U.S. All Private Equity TVM and IRR benchmarks as provided by Private iQ. Performance of funds that are less than two years old are not meaningful. Note that Burgiss Private iQ data is continuously updated and is therefore subject to change.

VINTAGE YEAR	COMMIT	CONT	DIST	MARKET VALUE	UNFUNDED	EXPOSURE	TVM	IRR*	PME RETURN*	PME SPREAD*	PRIVATE IQ U.S. ALL PE 50TH PERCENTILE TVM	PRIVATE IQ U.S. ALL PE 50TH PERCENTILE IRR
1998	$10.0	$10.0	$13.8	$0.0	$0.0	$0.0	1.37x	6.3%	3.4%	2.9%	1.35x	6.0%
1999	$54.5	$63.0	$91.4	$0.0	$0.0	$0.0	1.45x	8.8%	6.4%	2.4%	0.89x	(1.5%)
2000	$28.8	$33.8	$42.5	$1.2	$0.0	$1.2	1.29x	6.4%	6.2%	0.2%	1.19x	2.9%
2001	$49.1	$58.8	$99.4	$0.8	$0.4	$1.2	1.70x	21.1%	8.2%	12.9%	1.49x	7.7%
2002	$5.0	$4.8	$7.3	$0.0	$0.0	$0.0	1.54x	23.3%	7.5%	15.8%	1.46x	9.1%
2003	$28.9	$31.8	$68.0	$0.6	$2.5	$3.1	2.16x	25.0%	7.2%	17.8%	1.52x	9.6%
2004	$54.3	$59.2	$62.3	$2.6	$0.9	$3.4	1.10x	2.0%	6.8%	(4.9%)	1.49x	8.2%
2005	$68.2	$76.7	$107.5	$4.8	$1.1	$6.0	1.47x	6.8%	7.8%	(1.0%)	1.38x	6.3%
2006	$135.0	$152.5	$220.7	$7.3	$1.6	$8.8	1.50x	7.5%	9.0%	(1.5%)	1.43x	5.9%
2007	$123.4	$134.7	$165.6	$11.6	$5.8	$17.4	1.32x	6.0%	11.4%	(5.4%)	1.58x	10.1%
2008	$194.7	$226.1	$336.4	$32.4	$8.2	$40.6	1.63x	11.5%	13.7%	(2.2%)	1.53x	9.8%
2009	$46.9	$46.4	$90.0	$10.4	$2.3	$12.7	2.17x	17.5%	14.4%	3.1%	1.99x	16.2%
2010	$42.5	$47.8	$67.6	$15.8	$6.4	$22.3	1.74x	15.5%	13.0%	2.5%	1.69x	12.6%
2011	$193.0	$198.7	$301.1	$74.9	$16.6	$91.5	1.89x	15.9%	13.2%	2.8%	1.97x	14.9%
2012	$133.6	$145.8	$210.5	$76.9	$12.6	$89.5	1.97x	16.5%	12.2%	4.3%	1.90x	15.4%
2013	$161.0	$150.0	$174.0	$66.6	$24.4	$91.0	1.60x	12.7%	12.4%	0.3%	2.07x	16.4%
2014	$169.9	$178.0	$195.6	$151.8	$24.0	$175.8	1.95x	17.3%	11.7%	5.5%	1.99x	15.1%
2015	$121.8	$116.4	$137.1	$93.9	$13.7	$107.5	1.98x	20.6%	12.1%	8.5%	1.88x	16.7%
2016	$92.9	$101.6	$86.2	$121.9	$8.0	$130.0	2.05x	20.8%	11.5%	9.3%	1.96x	20.7%
2017	$144.8	$140.0	$54.6	$185.1	$17.6	$202.7	1.71x	18.4%	9.5%	8.9%	1.88x	22.4%
2018	$225.3	$184.7	$54.1	$228.8	$58.7	$287.5	1.53x	21.9%	8.1%	13.9%	1.67x	21.7%
2019	$247.8	$186.7	$31.5	$231.3	$75.5	$306.8	1.41x	22.5%	3.3%	19.2%	1.42x	20.3%
2020	$165.3	$110.6	$5.8	$130.1	$59.7	$189.8	1.23x	15.2%	(1.1%)	16.3%	1.25x	15.9%
2021	$365.4	$190.9	$4.7	$206.0	$178.6	$384.7	1.10x	NM	NM	NM	NM	NM
2022	$444.5	$49.3	$1.1	$47.2	$396.0	$443.2	0.98x	NM	NM	NM	NM	NM
2023	$112.9	$8.3	$0.0	$6.8	$104.6	$111.4	0.82x	NM	NM	NM	NM	NM
Total	**$3,419.3**	**$2,706.6**	**$2,629.0**	**$1,708.8**	**$1,019.3**	**$2,728.1**	**1.60x**	**12.3%**	**10.4%**	**2.0%**	**1.46x**	**11.9%**

*PME Return = Russell 3000 PME+; PME Spread is calculated as IRR minus PME Return.

*Performance of funds with less than two years of activity is not considered meaningful.

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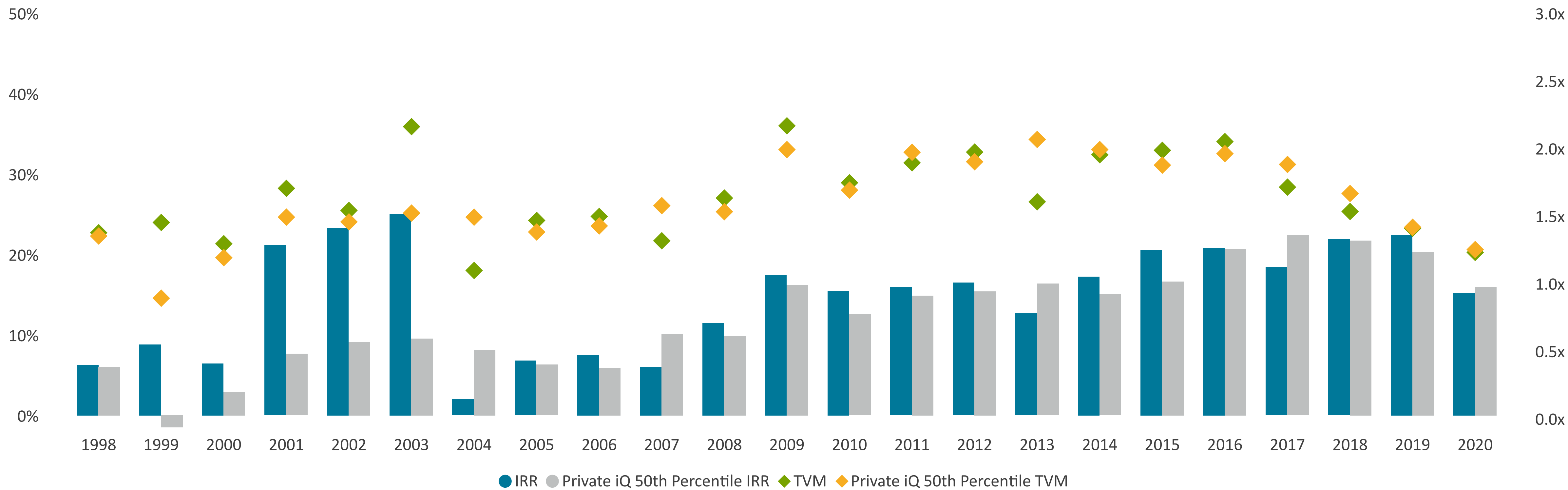
PERFORMANCE BY VINTAGE YEAR CONTINUED



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PERFORMANCE BY STRATEGY/SUB-STRATEGY

As of March 31, 2023. In USD millions.

STRATEGY	COMMIT	CONT	DIST	MARKET VALUE	UNFUNDED	EXPOSURE	TVM	IRR*
Buyout	**$1,948.1**	**$1,538.2**	**$1,499.8**	**$1,035.6**	**$598.0**	**$1,633.6**	**1.65x**	**13.3%**
Mega Buyout	$791.4	$517.2	$303.2	$506.8	$323.4	$830.2	1.57x	15.2%
Large Buyout	$608.5	$468.8	$562.0	$313.6	$206.5	$520.1	1.87x	20.5%
Middle-Market Buyout	$333.4	$327.6	$333.1	$159.6	$53.5	$213.1	1.50x	9.1%
Small Buyout	$214.8	$224.6	$301.5	$55.6	$14.6	$70.2	1.59x	10.9%
Special Situations	**$484.5**	**$391.2**	**$384.5**	**$257.4**	**$157.2**	**$414.6**	**1.64x**	**19.5%**
Growth Equity	**$384.8**	**$296.3**	**$266.9**	**$235.4**	**$118.3**	**$353.8**	**1.70x**	**16.2%**
Secondaries	**$337.1**	**$230.1**	**$236.3**	**$121.9**	**$105.8**	**$227.7**	**1.56x**	**15.1%**
Multi-Strategy	**$118.7**	**$87.6**	**$67.2**	**$40.5**	**$38.6**	**$79.1**	**1.23x**	**4.7%**
Co-Investment	$41.2	$23.4	$2.8	$20.8	$18.1	$38.9	1.01x	0.7%
Diversified	$25.0	$8.4	$0.1	$11.7	$16.6	$28.3	1.41x	NM
Funds	$52.5	$55.8	$64.2	$8.1	$3.9	$12.0	1.30x	4.5%
Other	**$146.2**	**$163.2**	**$174.2**	**$17.9**	**$1.3**	**$19.3**	**1.18x**	**2.4%**
Venture Capital	$102.6	$110.8	$117.0	$16.7	$0.4	$17.1	1.21x	2.4%
Mezzanine	$16.1	$20.3	$26.0	$1.0	$0.7	$1.7	1.33x	10.1%
Energy	$27.5	$32.0	$31.2	$0.2	$0.3	$0.5	0.98x	(0.3%)
Total	**$3,419.3**	**$2,706.6**	**$2,629.0**	**$1,708.8**	**$1,019.3**	**$2,728.1**	**1.60x**	**12.3%**

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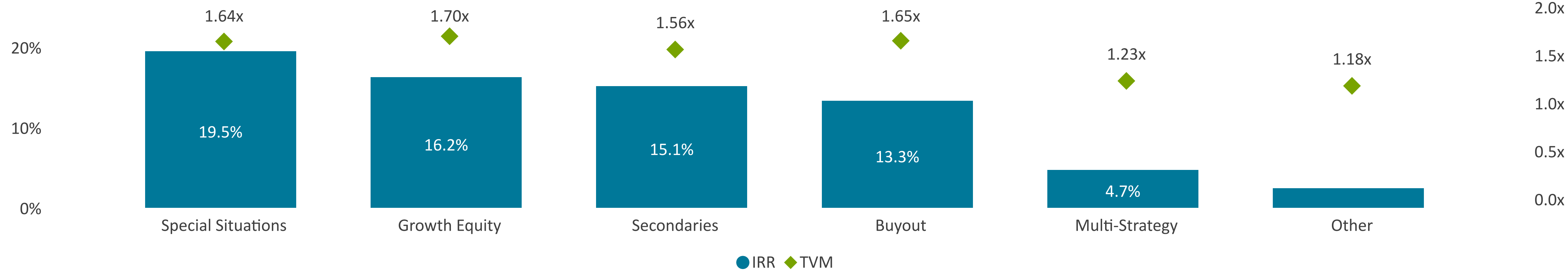
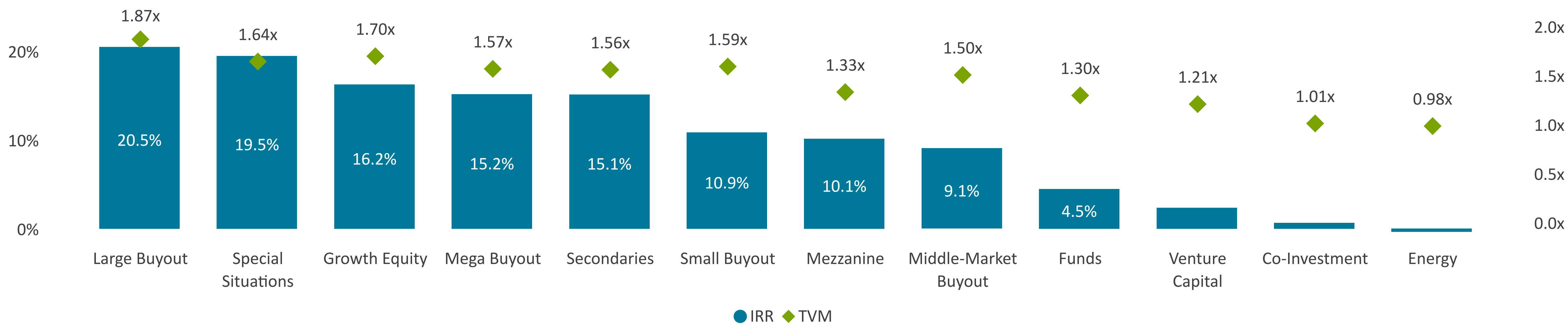
PERFORMANCE BY STRATEGY

As of March 31, 2023. In USD millions.



PERFORMANCE BY SUB-STRATEGY

As of March 31, 2023. In USD millions.



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PERFORMANCE BY STRUCTURE

As of March 31, 2023. In USD millions.

STRUCTURE	COMMIT	CONT	DIST	MARKET VALUE	UNFUNDED	EXPOSURE	TVM	IRR
Fund	$3,058.0	$2,506.6	$2,513.3	$1,540.8	$847.4	$2,388.2	1.62x	12.5%
Side Car	$243.8	$113.6	$49.3	$127.4	$133.4	$260.8	1.56x	17.2%
SMA	$99.0	$68.3	$42.2	$40.4	$37.5	$77.8	1.21x	4.6%
FoF	$18.5	$18.1	$24.2	$0.2	$1.1	$1.3	1.35x	5.7%
Total	**$3,419.3**	**$2,706.6**	**$2,629.0**	**$1,708.8**	**$1,019.3**	**$2,728.1**	**1.60x**	**12.3%**

As of March 31, 2023. In USD millions.

DIRECT/CO-INVESTMENTS	COMMIT	CONT	DIST	MARKET VALUE	UNFUNDED	EXPOSURE	TVM	IRR
Direct Investments	$3,134.3	$2,569.6	$2,576.8	$1,560.6	$867.9	$2,428.5	1.61x	12.3%
Co-Investment	$285.0	$137.0	$52.2	$148.2	$151.5	$299.7	1.46x	15.1%
Total	**$3,419.3**	**$2,706.6**	**$2,629.0**	**$1,708.8**	**$1,019.3**	**$2,728.1**	**1.60x**	**12.3%**

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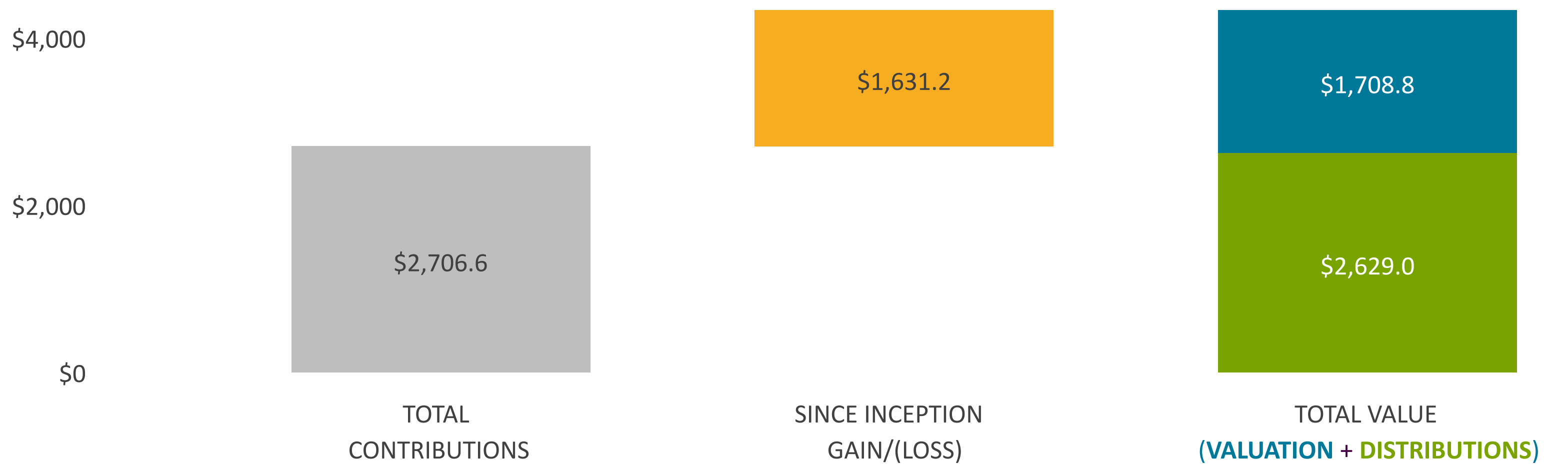
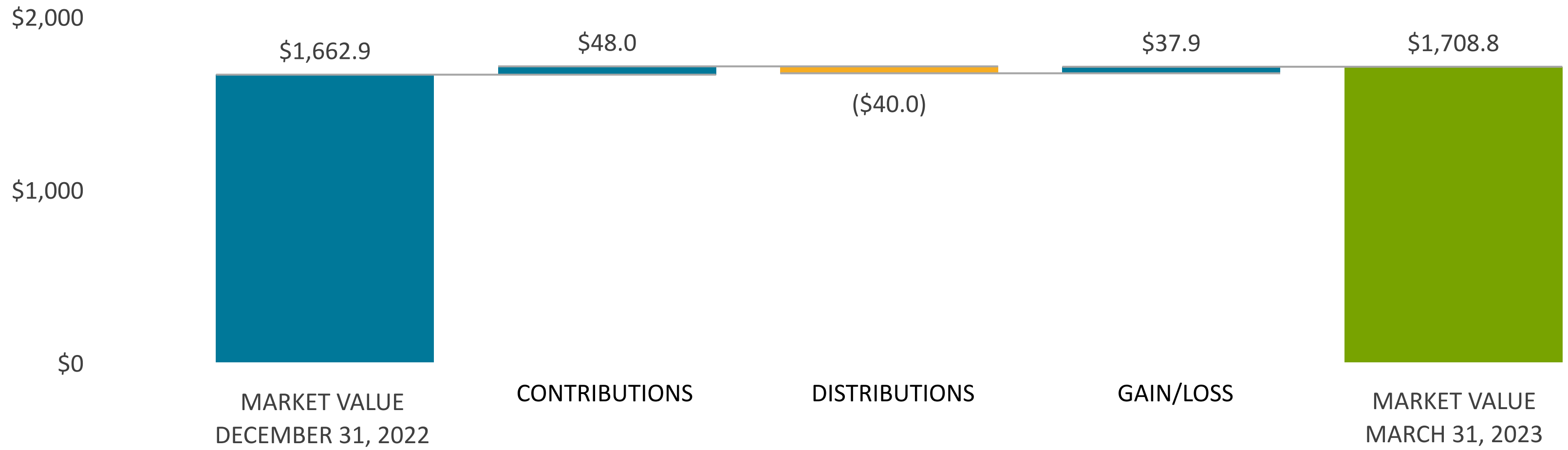
SINCE INCEPTION VALUATION MOVEMENT

Through March 31, 2023, New York City Fire Dept Pension's portfolio has generated a gain of $1,631.2 million.



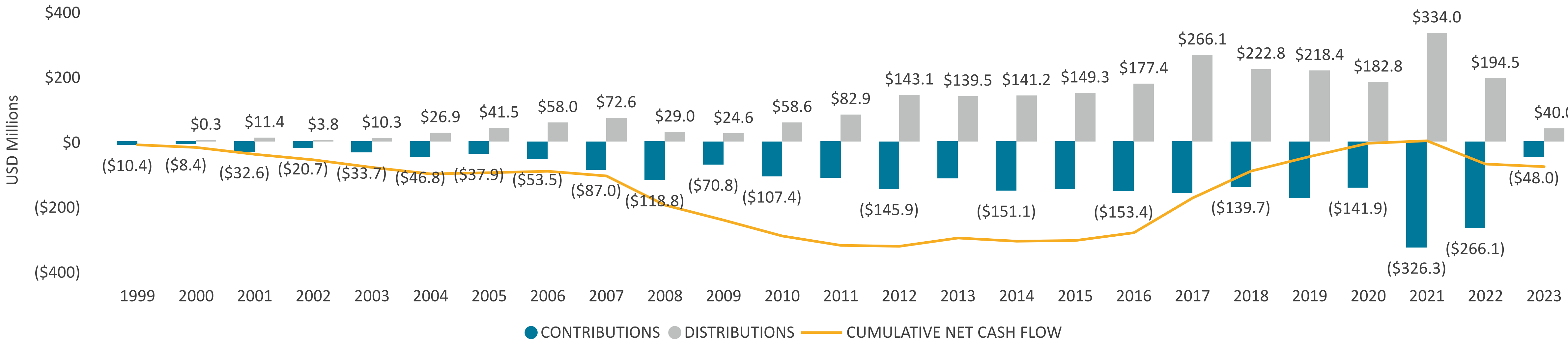
QUARTERLY VALUATION MOVEMENT

During the first quarter of 2023, the value of New York City Fire Dept Pension's portfolio increased by $37.9 million, or 2.3%.



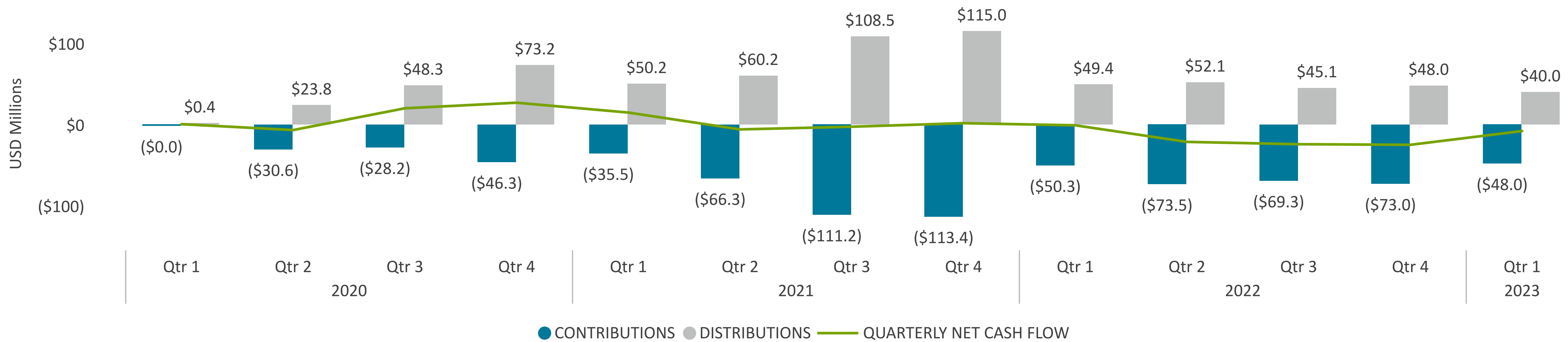
SINCE INCEPTION CASH FLOW ACTIVITY

During the three months ended March 31, 2023, the portfolio contributed $48.0 million and received $40.0 million of distributions, for a net cash outflow of $8.0 million.



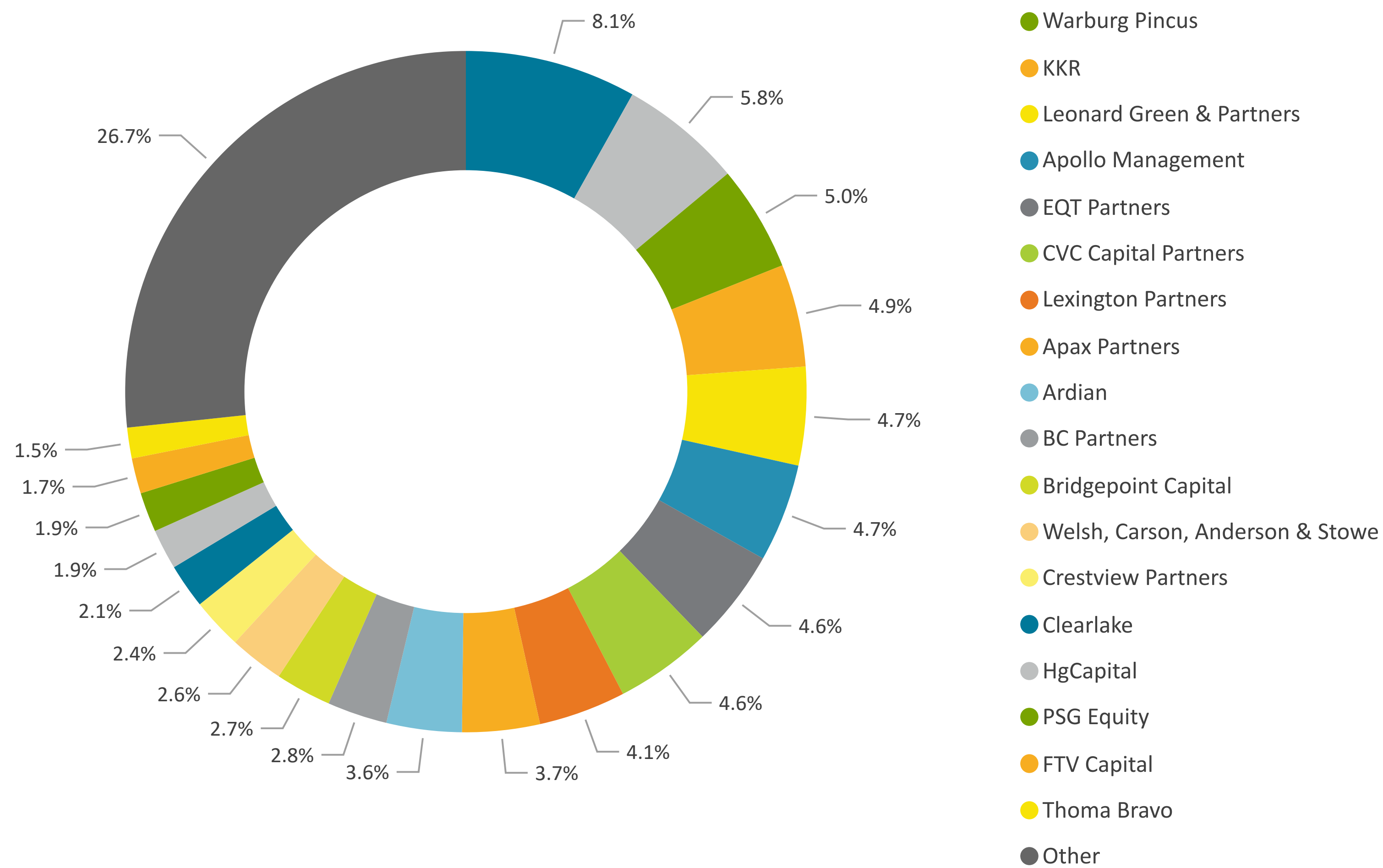
QUARTERLY CASH FLOW ACTIVITY

During the first quarter of 2023, the portfolio contributed $48.0 million and received $40.0 million of distributions, for a net cash outflow of $8.0 million.

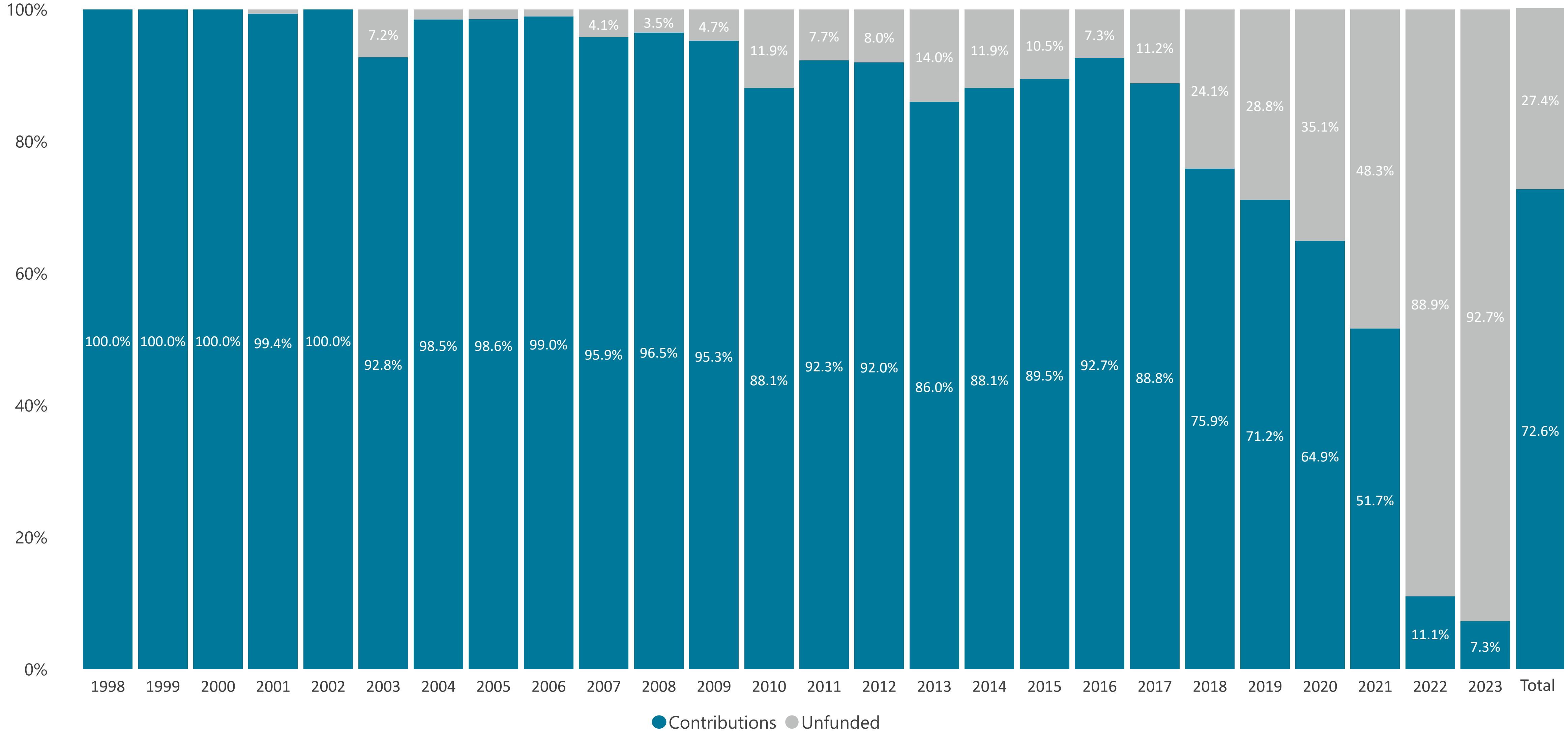


MANAGER DIVERSIFICATION

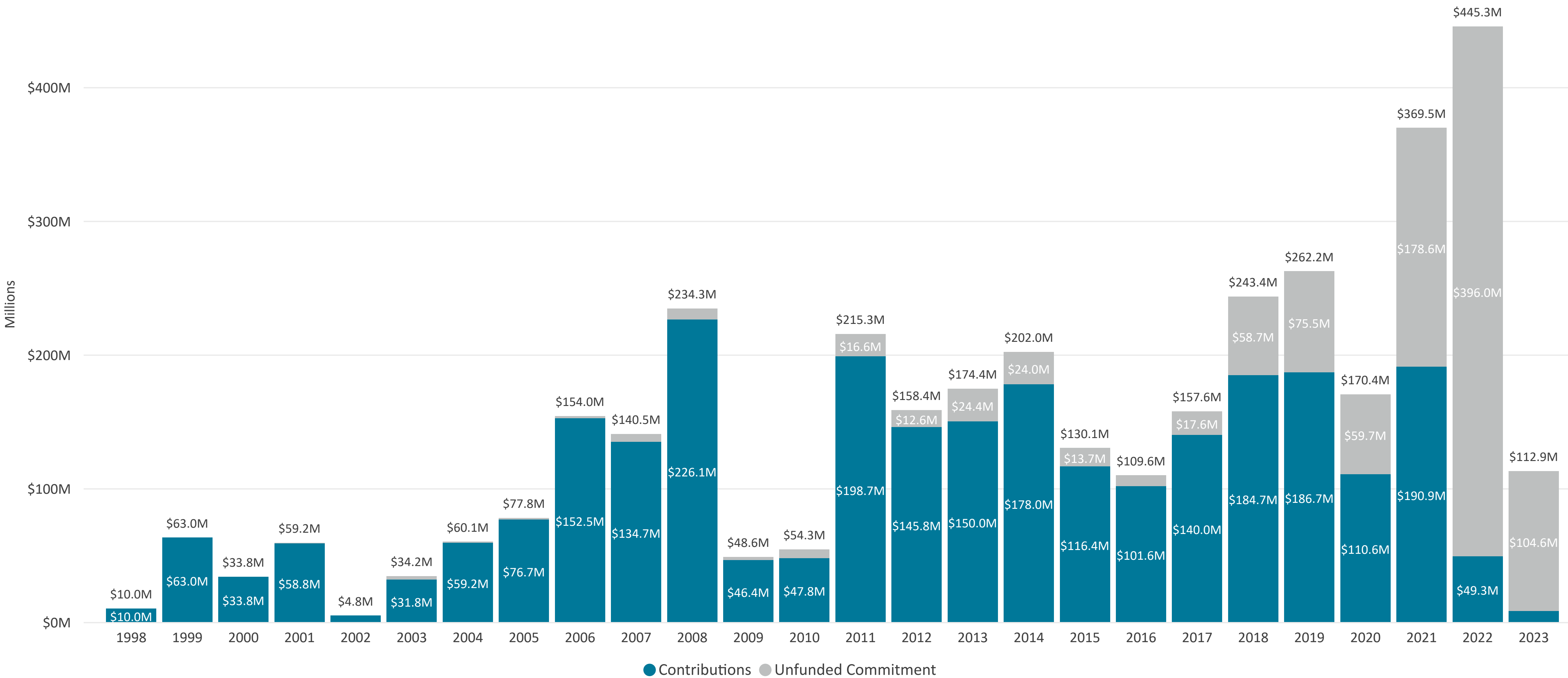
Portfolio Total Exposure by Investment Manager



INVESTED CAPITAL BY VINTAGE YEAR (%)

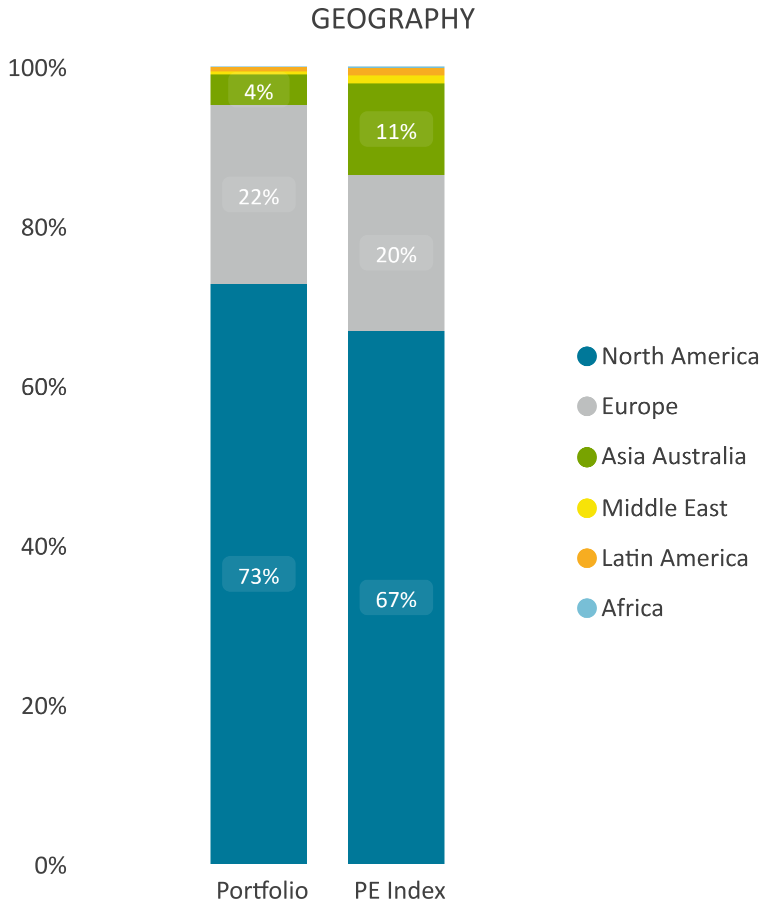


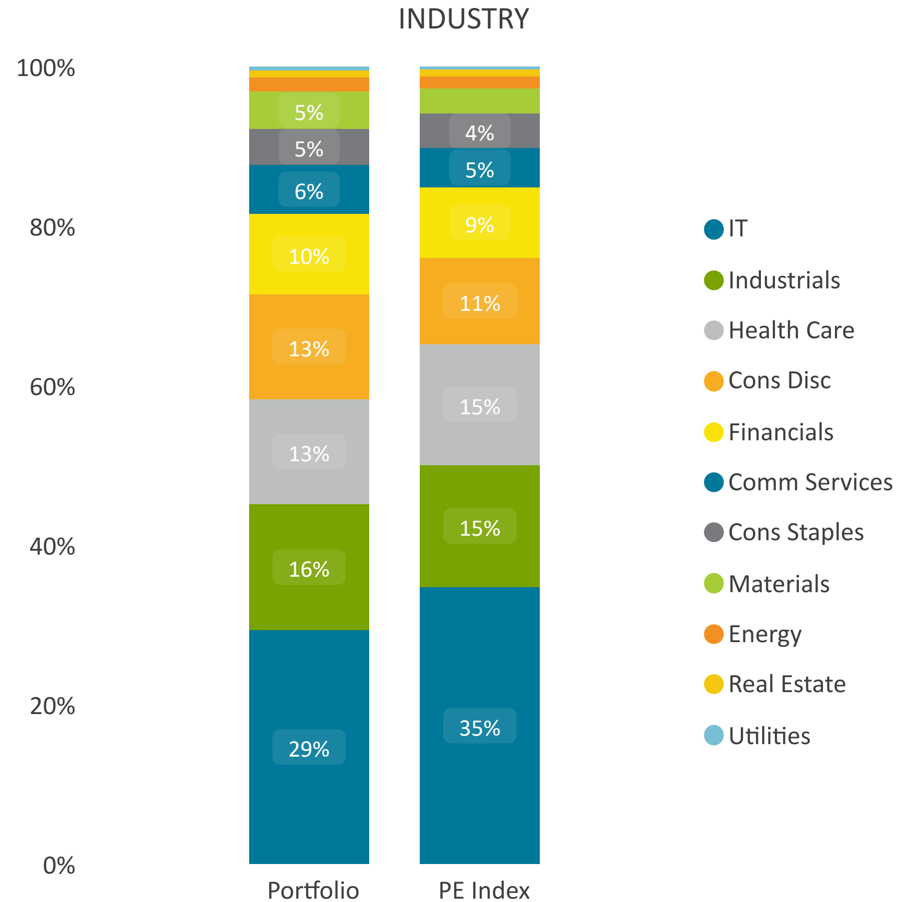
INVESTED CAPITAL BY VINTAGE YEAR (US$)

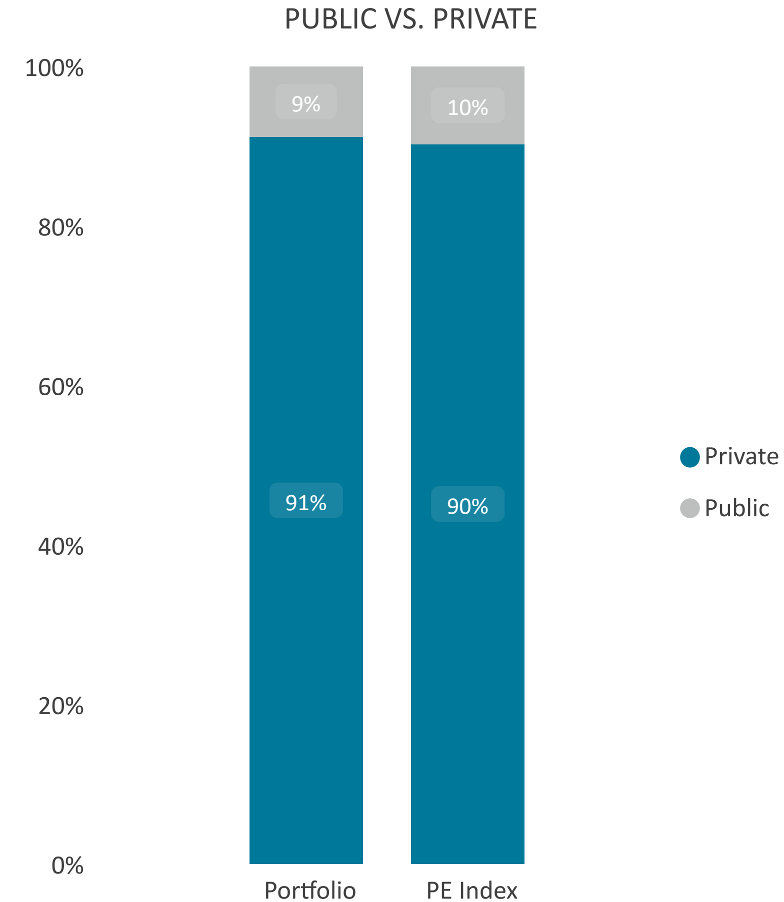


PORTFOLIO COMPANY DIVERSIFICATION

The following chart illustrates the portfolio's diversification by geography, industry (excluding funds-of-funds), and publicly traded vs. privately held assets based on Market Value at the portfolio company level as of March 31, 2023.



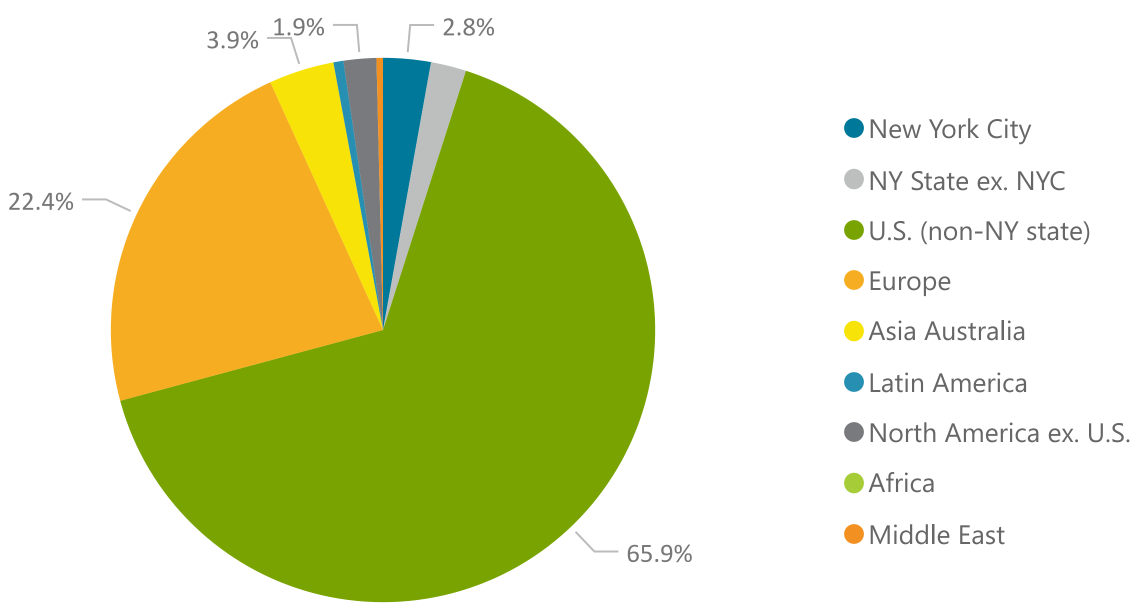




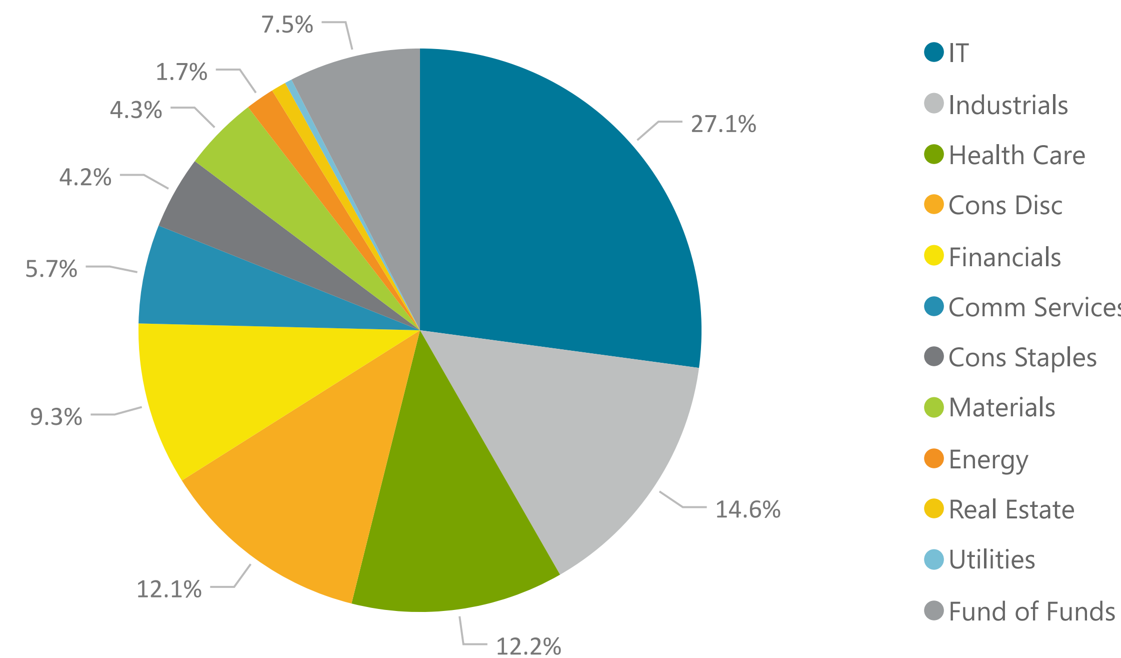
PE Index reflects total industry exposure of the StepStone Portfolio Analytics and Reporting ("SPAR") Asset Benchmark. SPAR data are continuously updated and subject to change.

PORTFOLIO COMPANY EXPOSURE

GEOGRAPHIC EXPOSURE BY CURRENT MARKET VALUE

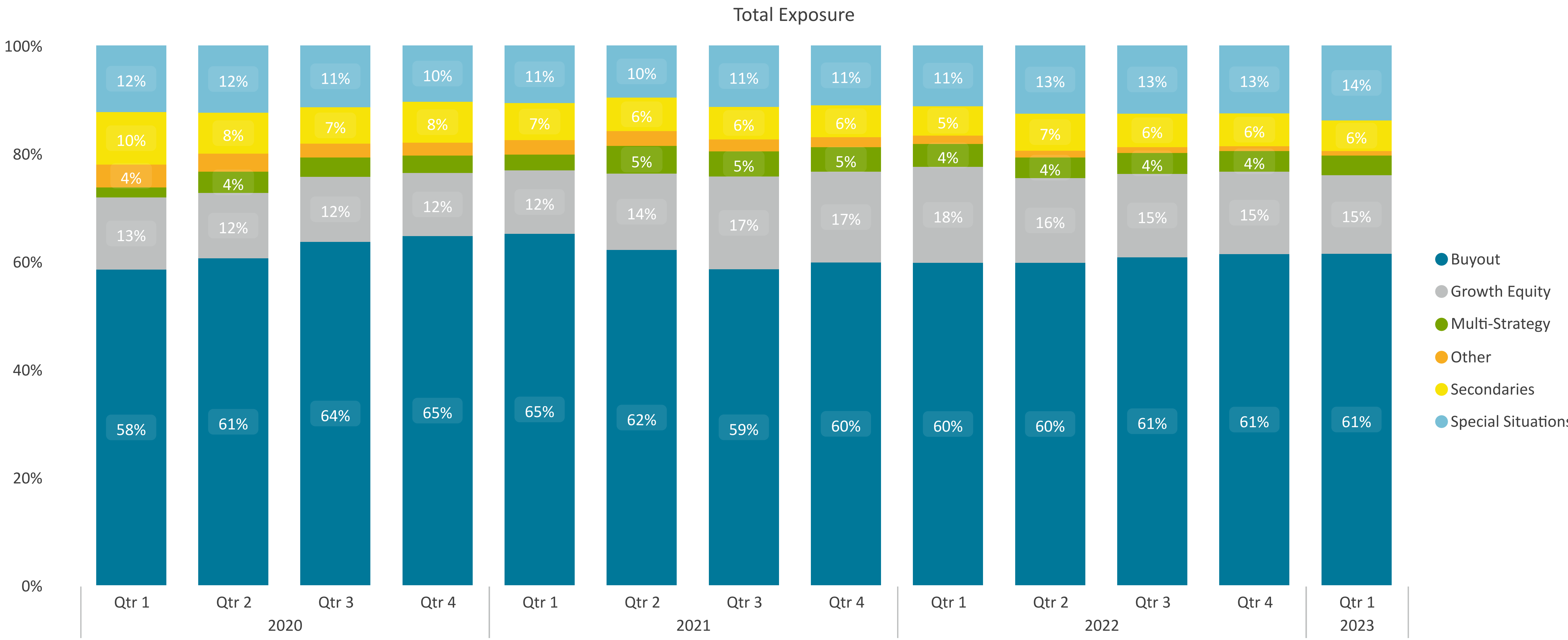


INDUSTRY EXPOSURE BY CURRENT MARKET VALUE



STRATEGY DIVERSIFICATION

The following chart illustrates the portfolio's diversification by strategy at the underlying investment level as of March 31, 2023.



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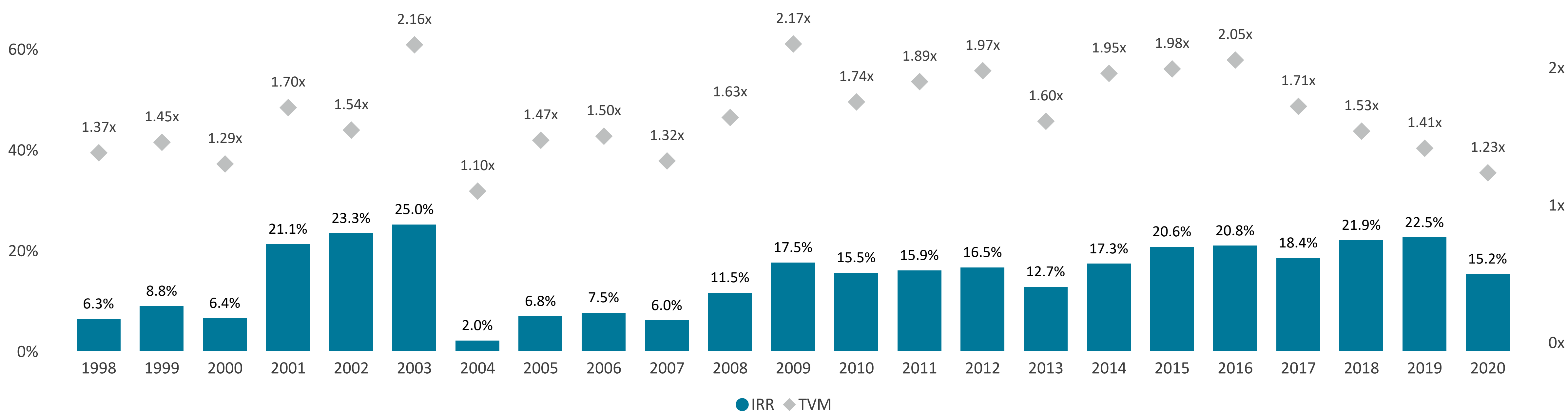
PERFORMANCE BY VINTAGE YEAR



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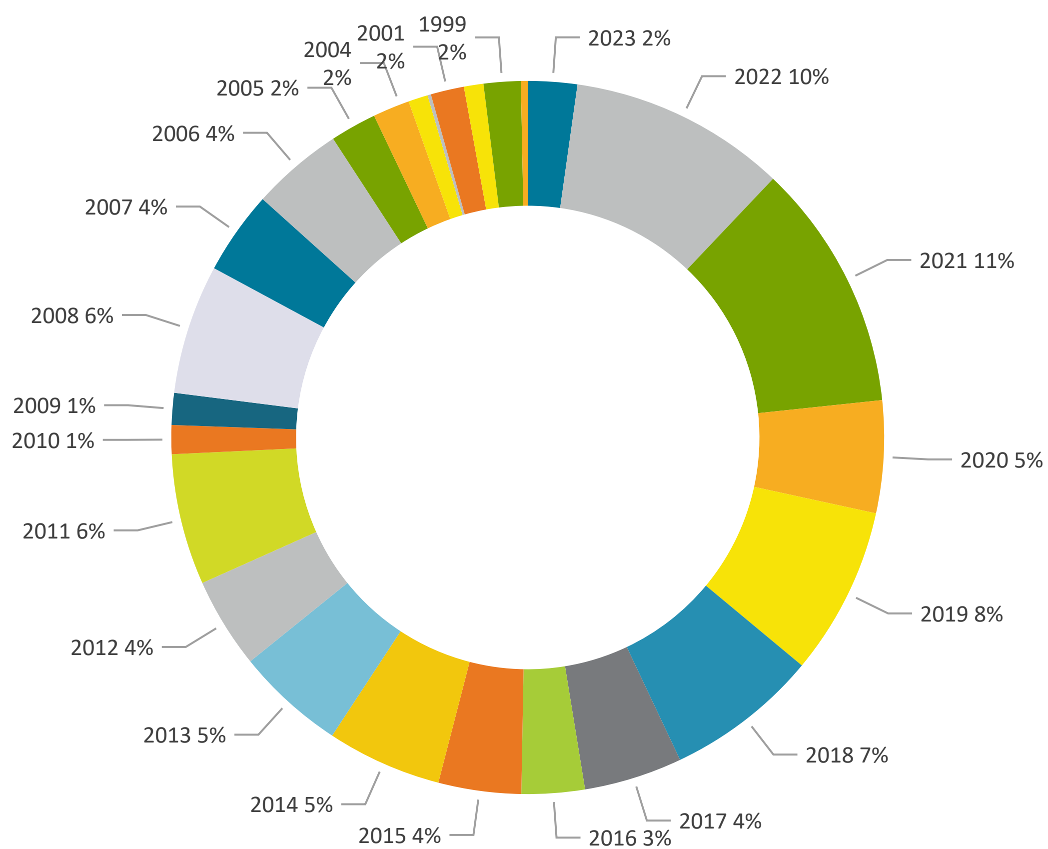
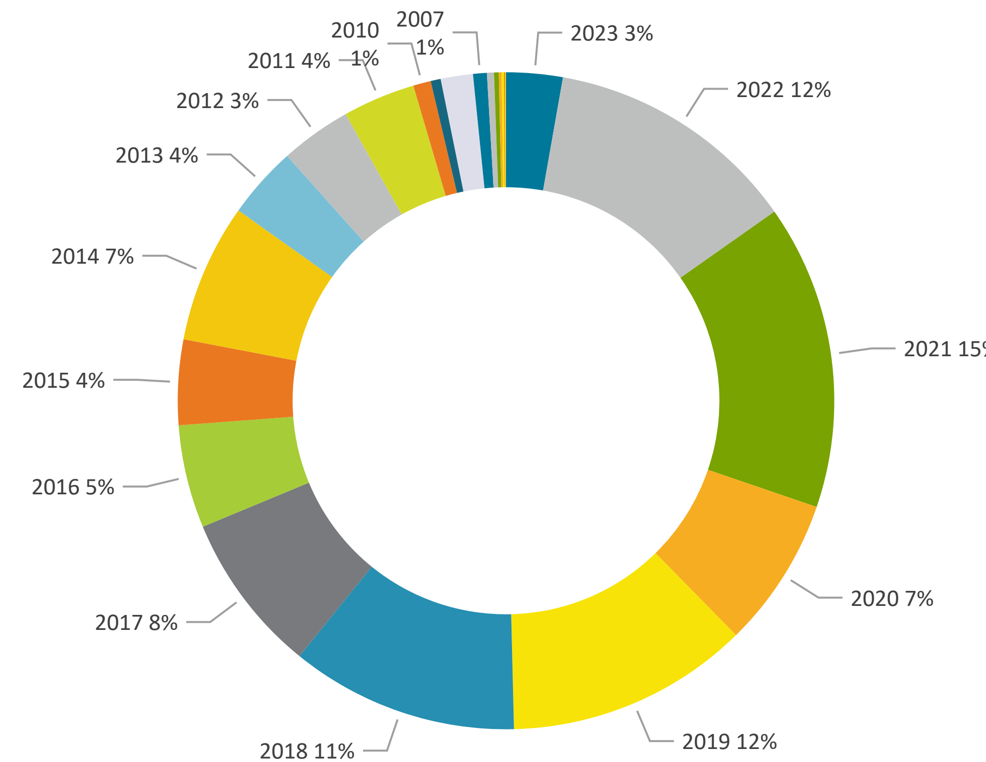
VINTAGE YEAR DIVERSIFICATION

COMMITMENT



NAV + UNFUNDED



APPENDIX

New York City Fire Pension Fund
Private Equity Portfolio
As of March 31, 2023 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR[1]	PME Return[2]	PME Spread[3]
Active Investments										
1999	Cypress Merchant Banking Partners II, L.P.	3/29/1999	$ 22,586,486	$ 26,972,134	$ 25,292,077	$ 9,237	0.94x	(1.2%)	5.5%	(6.7%)
1999	Lincolnshire Equity Fund II, L.P.	10/20/1999	6,899,005	7,223,050	14,158,254	26,420	1.96x	24.6%	6.9%	17.6%
2000	SCP Private Equity Partners II, L.P.	6/15/2000	15,000,000	16,834,296	6,514,303	1,204,446	0.46x	(8.2%)	5.7%	(13.8%)
2001	Apollo Investment Fund V, L.P.	4/13/2001	15,000,000	23,379,009	46,122,367	127,562	1.98x	38.8%	8.3%	30.4%
2001	CVC European Equity Partners III, L.P.	9/4/2001	10,000,000	11,880,366	29,775,858	694,513	2.56x	41.0%	10.9%	30.2%
2003	FS Equity Partners V, L.P.	1/20/2003	10,000,000	8,586,776	16,889,363	564,839	2.03x	15.2%	5.0%	10.3%
2003	Blackstone Capital Partners IV, L.P.	2/26/2003	13,875,989	17,172,972	42,140,062	53,148	2.46x	36.3%	8.5%	27.8%
2003	Ares Corporate Opportunities Fund, L.P.	4/1/2003	5,000,000	5,998,308	8,941,880	6,020	1.49x	13.1%	7.4%	5.7%
2004	Markstone Capital Partners, LP	1/30/2004	5,000,000	5,862,384	2,477,825	34,027	0.43x	(29.0%)	10.3%	(39.3%)
2004	FdG Capital Partners II LP	8/30/2004	5,000,000	5,387,768	6,421,816	110,025	1.21x	3.7%	6.7%	(3.1%)
2004	Lincolnshire Equity Fund III, L.P.	10/1/2004	5,000,000	5,046,815	7,777,717	1,857,303	1.91x	27.6%	11.3%	16.3%
2004	Yucaipa American Alliance Fund I, LP	10/1/2004	5,000,000	7,491,869	8,800,690	12,642	1.18x	3.9%	10.7%	(6.8%)
2004	New York/Fairview Emerging Managers Fund, L.P.-Tranche 1	10/21/2004	2,000,000	2,053,879	2,189,349	30,025	1.08x	1.3%	8.7%	(7.4%)
2004	Medica III Investments (International) L.P.	8/21/2006	3,000,000	2,992,836	1,267,948	508,000	0.59x	(8.1%)	(5.5%)	(2.6%)
2005	Palladium Equity Partners III, L.P.	11/12/2004	10,000,000	10,543,150	20,097,730	14,492	1.91x	15.3%	11.5%	3.9%
2005	Snow Phipps Group, L.P.	9/7/2005	5,000,000	6,126,360	5,586,954	2,281,019	1.28x	4.6%	11.1%	(6.5%)
2005	FirstMark Capital I, L.P. (fka FirstMark IV)	11/21/2005	1,500,000	1,639,064	12,134,786	2,079,005	8.67x	33.0%	10.3%	22.6%
2005	USPF II Institutional Fund, L.P.	11/23/2005	5,000,000	6,594,940	7,911,623	61,346	1.21x	3.3%	7.7%	(4.4%)
2005	JP Morgan Fleming (Tranche A)	12/21/2005	3,000,000	3,025,678	3,415,831	346,613	1.24x	3.9%	10.8%	(6.9%)
2005	Arlington Capital Partners II, L.P.	4/20/2006	4,000,000	4,069,527	7,137,350	41,511	1.76x	11.3%	6.8%	4.5%
2006	Aisling Capital II, LP	1/12/2006	1,000,000	1,178,021	1,141,279	42,656	1.01x	0.1%	7.7%	(7.6%)
2006	Blackstone Capital Partners V, L.P.	4/13/2006	9,448,250	10,065,709	16,489,375	84,291	1.65x	8.0%	8.4%	(0.4%)
2006	Apollo Investment Fund VI, L.P.	5/10/2006	20,000,000	25,741,832	38,519,613	360,072	1.51x	8.6%	7.6%	1.1%
2006	Catterton Partners VI, L.P.	12/14/2006	5,000,000	5,693,763	9,844,554	1,204,603	1.94x	11.4%	9.1%	2.4%
2006	First Reserve Fund XI, L.P.	12/14/2006	5,000,000	5,313,265	3,518,155	2,249	0.66x	(9.4%)	6.8%	(16.2%)
2006	Permira IV, L.P.	12/14/2006	5,527,079	6,016,234	8,822,843	1,241,871	1.67x	9.1%	9.5%	(0.4%)
2006	GF Capital Private Equity Fund, L.P.	12/18/2006	3,000,000	3,076,007	4,058,641	1,773,299	1.90x	11.4%	11.6%	(0.3%)
2006	RRE Ventures IV, L.P.	12/19/2006	2,500,000	3,188,791	4,536,915	893,889	1.70x	6.3%	11.5%	(5.2%)
2006	Coller International Partners V, L.P.	12/21/2006	5,000,000	4,372,182	5,963,424	18,753	1.37x	7.5%	10.6%	(3.2%)
2006	MidOcean Partners III, L.P.	12/21/2006	9,705,796	11,662,930	26,004,939	18,553	2.23x	13.6%	10.0%	3.6%
2006	The Fourth Cinven Fund	1/22/2007	2,735,927	2,870,280	4,124,333	1,700	1.44x	7.3%	7.5%	(0.2%)
2006	Falconhead Capital Partners II, L.P.	3/23/2007	4,000,000	4,640,878	7,151,330	127,420	1.57x	6.6%	9.2%	(2.6%)
2006	Atlantic Equity Partners IV, L.P.	10/30/2007	3,768,757	3,686,806	4,216,664	1,490,133	1.55x	4.0%	11.2%	(7.2%)
2007	Pegasus Partners IV, L.P.	1/29/2007	7,500,000	9,152,510	6,958,262	969,844	0.87x	(2.6%)	11.1%	(13.7%)
2007	Olympus Capital Asia III, L.P.	1/31/2007	5,000,000	5,854,855	3,267,979	424,230	0.63x	(9.6%)	11.1%	(20.7%)
2007	FTVentures III, LP	3/1/2007	2,500,000	2,768,623	5,452,899	775,702	2.25x	15.3%	10.2%	5.1%
2007	Highland Consumer Fund I LP	3/16/2007	2,000,000	2,003,212	1,417,209	133,376	0.77x	(3.2%)	11.0%	(14.2%)
2007	Montreux Equity Partners IV, L.P.	3/27/2007	5,000,000	5,000,000	2,761,158	3,734,335	1.30x	3.1%	9.9%	(6.8%)
2007	Gleacher Mezzanine Fund II, L.P.	3/30/2007	3,000,000	2,753,091	3,701,378	327	1.34x	10.6%	12.1%	(1.5%)
2007	SCP Vitalife Partners II Fund	4/13/2007	5,000,000	5,024,924	395	923,638	0.18x	(13.4%)	(0.5%)	(12.9%)
2007	United States Power Fund III, L.P.	6/28/2007	5,000,000	5,915,665	7,586,407	149,063	1.31x	4.4%	9.9%	(5.6%)
2007	Carlyle Partners V, L.P.	7/6/2007	10,000,000	10,340,844	18,478,605	493,483	1.83x	13.7%	11.0%	2.7%
2007	PCG Clean Energy & Technology Fund (East), LLC	7/6/2007	10,000,000	9,047,736	2,794,136	720,308	0.39x	(11.0%)	12.8%	(23.7%)
2007	GSO Capital Opportunities Fund LP	7/16/2007	7,500,000	11,229,550	15,937,873	150,427	1.43x	17.3%	10.1%	7.2%
2007	New Mountain Partners III, L.P.	8/9/2007	10,000,000	10,589,531	25,179,571	419,855	2.42x	14.6%	13.2%	1.4%
2007	Vista Equity Partners Fund III, L.P.	10/3/2007	7,500,000	8,072,451	19,159,878	874,590	2.48x	26.8%	9.9%	17.0%
2007	Trilantic Capital Partners IV L.P.	10/22/2007	7,236,332	7,390,450	11,303,123	378,366	1.58x	13.1%	10.9%	2.2%
2007	Pine Brook Capital Partners, L.P.	1/11/2008	7,500,000	8,524,960	11,174,201	530,661	1.37x	7.8%	12.1%	(4.2%)
2007	Princeton Capital Corp. (fka Capital Point)	10/17/2008	3,000,000	3,497,432	2,525,081	880,540	0.97x	(0.4%)	14.8%	(15.2%)
2008	Paladin III (NY City), L.P.	1/8/2008	7,500,000	10,599,720	21,358,828	2,877,618	2.29x	13.2%	12.2%	1.1%
2008	Apollo Investment Fund VII, L.P.	1/28/2008	25,000,000	30,660,396	53,237,683	282,543	1.75x	22.6%	13.8%	8.8%
2008	NGN BioMed Opportunity II, L.P.	2/11/2008	5,000,000	4,787,955	3,836,553	2,397,950	1.30x	3.2%	14.6%	(11.4%)
2008	Riverstone/Carlyle Global Energy & Power Fund IV, L.P.	3/3/2008	7,500,000	8,640,420	9,341,385	3,058	1.08x	2.1%	13.9%	(11.9%)
2008	Yucaipa American Alliance Fund II, LP	3/28/2008	15,000,000	20,587,385	22,408,545	12,238,508	1.68x	8.0%	12.2%	(4.2%)
2008	Levine Leichtman Capital Partners IV, L.P.	4/8/2008	5,000,000	5,353,601	8,479,347	473,584	1.67x	17.8%	14.2%	3.6%
2008	New York/Fairview Emerging Managers Fund, L.P.-Tranche 2	5/28/2008	5,000,000	5,065,974	10,949,444	2,409,891	2.64x	17.5%	13.0%	4.5%
2008	Yucaipa Corporate Initiatives Fund II, LP	6/23/2008	4,676,976	4,592,705	4,071,552	66,081	0.90x	(1.4%)	12.3%	(13.7%)
2008	CVC European Equity Partners V, L.P.	7/21/2008	13,729,919	14,803,920	28,829,170	317,953	1.97x	16.4%	12.8%	3.6%
2008	GI Partners Fund III L.P.	7/29/2008	7,500,000	8,086,843	12,702,734	3,531	1.57x	13.0%	15.3%	(2.4%)
2008	Ares Corporate Opportunities Fund III, L.P.	7/30/2008	10,000,000	12,252,779	25,936,280	99,782	2.12x	20.2%	12.1%	8.1%
2008	GCM Grosvenor NYCFDPF Emerging Manager Fund, L.P.	8/22/2008	8,979,798	11,950,676	13,809,298	3,761,251	1.47x	8.9%	13.3%	(4.4%)
2008	First Reserve Fund XII, L.P.	8/25/2008	5,000,000	5,554,103	2,889,175	6,092	0.52x	(17.9%)	17.1%	(35.0%)
2008	Landmark Equity Partners XIV, L.P.	9/19/2008	13,630,000	13,312,305	16,880,844	1,018,211	1.34x	9.4%	14.5%	(5.2%)
2008	Crestview Partners II, L.P.	10/1/2008	7,500,000	9,150,572	14,378,354	3,273,324	1.93x	13.9%	14.2%	(0.3%)
2008	Milestone Partners III, L.P.	10/17/2008	3,000,000	3,237,896	2,857,008	546,275	1.05x	0.8%	14.3%	(13.5%)
2008	Euro Choice IV L.P.	10/22/2008	6,441,168	6,023,874	8,189,279	158,978	1.39x	6.2%	13.4%	(7.3%)
2008	Avista Capital Partners II, L.P.	11/5/2008	10,000,000	13,180,598	21,191,004	448,100	1.64x	14.4%	14.7%	(0.3%)
2008	Bridgepoint Europe IV	11/14/2008	6,661,826	6,827,673	9,307,133	1,149,990	1.53x	9.5%	14.7%	(5.2%)
2008	Blue Wolf Capital Fund II, L.P.	11/19/2008	3,000,000	3,292,142	5,572,111	17,238	1.70x	10.7%	15.8%	(5.0%)
2008	Aisling Capital III, LP	11/20/2008	3,500,000	3,948,800	9,313,390	21,740	2.36x	26.0%	14.3%	11.7%
2008	Onex Partners III LP	12/10/2008	5,000,000	5,484,081	8,221,974	852,989	1.65x	11.4%	15.0%	(3.6%)
2009	NorthBound Emerging Manager Custom Fund LP	1/29/2009	5,000,000	4,366,772	6,663,730	623,616	1.67x	12.1%	14.3%	(2.2%)
2009	Welsh, Carson, Anderson & Stowe XI, L.P.	2/10/2009	7,500,000	7,448,557	12,051,289	519,476	1.69x	11.7%	15.0%	(3.3%)
2009	Scale Venture Partners III, LP	5/1/2009	5,000,000	4,981,767	12,750,882	1,877,130	2.94x	22.7%	13.6%	9.2%
2009	FS Equity Partners VI, L.P.	7/27/2009	12,500,000	12,613,697	35,645,530	5,541,272	3.27x	23.7%	14.5%	9.2%
2009	Lincolnshire Equity Fund IV, L.P.	8/5/2009	2,500,000	2,703,593	3,231,707	648,012	1.44x	8.0%	13.4%	(5.4%)
2009	Lexington Capital Partners VII, L.P.	12/3/2009	10,000,000	8,959,746	13,602,260	1,209,705	1.65x	13.8%	14.3%	(0.4%)
2010	Snow Phipps II, L.P.	1/8/2010	7,500,000	9,133,810	8,154,530	4,120,445	1.34x	7.1%	13.2%	(6.2%)
2010	Trident V, L.P.	4/29/2010	15,000,000	17,749,233	24,893,840	9,064,338	1.91x	12.0%	12.4%	(0.4%)
2010	Comvest Investment Partners IV, L.P.	10/21/2010	20,000,000	20,946,864	34,552,171	2,644,958	1.78x	27.6%	14.1%	13.5%

New York City Fire Pension Fund
Private Equity Portfolio
As of March 31, 2023 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR[1]	PME Return[2]	PME Spread[3]
2011	Blackstone Capital Partners VI, L.P.	1/24/2011	10,000,000	10,749,121	15,202,466	4,078,446	1.79x	12.4%	12.5%	(0.0%)
2011	Ampersand 2011	3/11/2011	5,000,000	5,000,000	16,193,623	39,441	3.25x	21.8%	13.0%	8.8%
2011	BDCM Opportunity Fund III, L.P.	4/8/2011	10,000,000	14,925,927	13,677,251	15,792,342	1.97x	11.5%	11.9%	(0.4%)
2011	AXA Secondary Fund V B L.P.	6/16/2011	40,000,000	32,956,743	52,820,879	110,284	1.61x	15.4%	14.8%	0.7%
2011	Wellspring Capital Partners V, L.P.	7/1/2011	7,500,000	7,972,133	11,360,178	2,404,413	1.73x	15.4%	12.0%	3.4%
2011	EQT VI, L.P.	8/1/2011	17,785,692	18,925,422	33,022,772	20,969	1.75x	13.6%	13.0%	0.6%
2011	Pegasus Partners V, L.P.	8/16/2011	6,236,975	8,035,510	6,817,802	3,586,144	1.29x	5.7%	14.1%	(8.3%)
2011	BC European Capital IX	9/19/2011	21,467,659	24,986,826	30,264,599	9,321,453	1.58x	10.5%	13.3%	(2.8%)
2011	American Securities Partners VI, L.P.	11/18/2011	20,000,000	22,430,793	39,236,550	11,893,043	2.28x	21.9%	12.9%	8.9%
2011	Vista Equity Partners Fund IV, L.P.	11/30/2011	30,000,000	31,301,795	39,522,402	22,954,400	2.00x	14.9%	13.0%	1.8%
2012	Warburg Pincus Private Equity XI, L.P.	5/24/2012	35,000,000	36,934,440	48,288,203	14,936,039	1.71x	12.1%	12.6%	(0.5%)
2012	Summit Partners Growth Equity Fund VIII-A, L.P.	6/14/2012	30,000,000	34,309,073	70,416,221	14,618,481	2.48x	26.4%	12.1%	14.3%
2012	NYCFPF - 2012 Emerging Manager Program[4]	6/21/2013	22,700,000	24,145,895	39,044,797	14,277,239	2.21x	18.3%	12.5%	5.8%
2012	Trilantic Capital Partners V L.P.	9/20/2012	10,000,000	10,939,709	15,002,270	3,374,911	1.68x	15.6%	12.3%	3.3%
2012	Palladium Equity Partners IV, L.P.	10/10/2012	10,000,000	10,252,396	7,216,906	9,441,450	1.62x	10.4%	12.4%	(2.1%)
2012	Ares Corporate Opportunities Fund IV, L.P.	11/5/2012	20,000,000	21,350,144	33,229,313	7,002,646	1.88x	14.7%	11.8%	2.9%
2012	Green Equity Investors VI, L.P.	11/30/2012	25,000,000	28,011,787	29,503,559	26,710,663	2.01x	14.1%	12.2%	1.9%
2011	Platinum Equity Capital Partners III, L.P.	1/14/2013	25,000,000	21,435,585	43,022,706	4,653,406	2.22x	35.8%	13.0%	22.8%
2013	Carlyle Partners VI, L.P.	7/3/2013	20,000,000	21,754,765	32,155,871	9,312,323	1.91x	15.1%	12.8%	2.3%
2014	Carlyle Partners VI, L.P. (Side Car)	9/23/2014	1,715,000	1,118,294	2,032,051	1,162,843	2.86x	12.3%	13.1%	(0.9%)
2013	Landmark Equity Partners XV, L.P.	10/30/2013	26,000,000	20,871,107	24,169,733	5,516,251	1.42x	11.9%	12.0%	(0.1%)
2013	Landmark - NYC Fund I, L.P.	12/24/2013	9,000,000	8,246,317	9,836,668	4,741,796	1.77x	15.6%	10.8%	4.8%
2013	Apollo Investment Fund VIII, L.P.	12/11/2013	40,000,000	39,069,416	43,243,090	14,880,839	1.49x	10.0%	13.2%	(3.2%)
2014	CVC Capital Partners VI, L.P.	2/18/2014	35,342,859	38,442,966	42,269,543	35,544,974	2.02x	17.1%	11.8%	5.2%
2013	Crestview Partners III, L.P.	3/3/2015	24,000,000	22,376,252	13,502,313	20,572,409	1.52x	11.9%	11.2%	0.7%
2014	Crestview Partners III (Co-Investment B), L.P.	12/17/2015	8,000,000	8,284,349	394,887	9,799,773	1.23x	3.8%	11.9%	(8.2%)
2014	Olympus Growth Fund VI, L.P.	1/24/2014	15,000,000	15,229,602	16,211,162	12,443,835	1.88x	16.7%	12.2%	4.5%
2013	ASF VI B L.P.	5/9/2014	30,000,000	24,788,293	32,035,986	4,363,829	1.47x	12.2%	12.1%	0.2%
2014	ASF VI B NYC Co-Invest L.P.	5/9/2014	10,000,000	8,590,312	10,586,096	2,371,468	1.51x	12.4%	9.7%	2.7%
2014	Vista Equity Partners Fund V, L.P.	9/8/2014	40,000,000	50,091,463	58,630,158	53,166,676	2.23x	19.5%	11.2%	8.4%
2014	Lexington Capital Partners VIII, L.P.	1/8/2015	40,000,000	36,383,049	36,118,389	24,579,390	1.67x	16.7%	12.1%	4.7%
2015	Siris Partners III, L.P.	5/4/2015	5,500,000	5,851,503	4,435,374	4,248,156	1.48x	11.8%	12.0%	(0.2%)
2015	Centerbridge Capital Partners III, L.P.	5/21/2015	4,200,000	5,536,198	5,253,028	4,089,105	1.69x	18.6%	11.2%	7.4%
2015	Welsh, Carson, Anderson & Stowe XII, L.P.	8/26/2015	14,000,000	13,417,537	19,676,823	13,168,075	2.45x	27.0%	12.0%	15.0%
2015	Warburg Pincus Private Equity XII, L.P.	12/21/2015	36,000,000	36,063,314	38,166,357	34,788,181	2.02x	18.1%	11.8%	6.3%
2015	ASF VII B L.P.	12/29/2015	17,000,000	11,411,841	8,735,442	9,971,911	1.64x	16.8%	12.9%	3.9%
2015	ASF VII B NYC Co-Invest L.P.	12/29/2015	9,000,000	6,310,753	6,021,672	5,133,249	1.77x	18.9%	10.8%	8.2%
2015	EQT VII, L.P.	1/8/2016	28,598,656	30,740,635	45,096,076	16,120,294	1.99x	22.5%	13.1%	9.3%
2016	American Securities Partners VII, L.P.	1/19/2016	14,000,000	13,714,837	7,217,737	19,087,456	1.92x	16.1%	11.9%	4.3%
2014	Bridgepoint Europe V L.P.	2/8/2016	11,363,954	10,934,719	14,951,251	6,426,325	1.96x	18.5%	13.8%	4.7%
2015	Bridgepoint Europe V Co-Invest	8/16/2016	3,481,357	3,197,721	6,649,138	1,965,657	2.69x	27.1%	10.9%	16.2%
2015	NYCFPF - 2015 Emerging Manager Program[5]	2/22/2016	26,250,000	25,652,311	10,206,932	36,604,060	1.82x	22.0%	9.7%	12.3%
2016	Vista Equity Partners Fund VI, L.P.	6/28/2016	28,000,000	34,936,431	29,364,413	42,484,744	2.06x	19.6%	11.6%	8.0%
2016	Platinum Equity Capital Partners IV, L.P.	3/21/2017	19,000,000	18,721,176	17,591,610	21,676,368	2.10x	25.0%	11.1%	13.9%
2018	Platinum Equity Capital Partners IV Co-Investment, L.P.	9/7/2018	3,000,000	2,104,085	418,633	2,601,290	1.44x	9.2%	8.4%	0.8%
2016	Apax IX USD, L.P.	5/12/2017	22,000,000	23,730,927	26,523,589	21,412,629	2.02x	23.2%	12.1%	11.2%
2017	Green Equity Investors VII, L.P.	5/12/2017	17,000,000	16,253,390	13,423,165	21,094,709	2.12x	22.6%	11.2%	11.4%
2017	Ares Corporate Opportunities Fund V, L.P.	6/22/2017	17,000,000	18,409,168	8,438,621	16,440,945	1.35x	9.6%	11.4%	(1.8%)
2017	KKR Americas Fund XII, L.P.	10/31/2017	28,000,000	27,052,347	11,984,653	34,955,414	1.74x	20.6%	8.3%	12.3%
2017	BC European Capital X	12/14/2017	15,940,366	15,121,501	2,708,395	19,578,154	1.47x	10.6%	10.3%	0.3%
2016	BCEC X Co-Investment	3/24/2017	6,414,690	6,453,468	2,105,141	9,897,323	1.86x	15.7%	10.4%	5.3%
2017	Warburg Pincus Financial Sector, L.P.	1/5/2018	21,000,000	21,133,677	8,091,567	30,184,675	1.81x	21.6%	9.7%	11.9%
2018	Platinum Equity Small Cap Fund, L.P.	6/27/2018	8,000,000	5,795,715	1,307,927	9,909,001	1.94x	30.4%	4.3%	26.1%
2018	EQT VIII, L.P.	8/10/2018	22,123,162	21,761,917	15,245,445	23,876,573	1.80x	26.9%	11.7%	15.2%
2018	EQT VIII Co-Investment	11/2/2018	7,904,259	7,628,750	5,928,922	9,828,561	2.07x	37.3%	8.5%	28.9%
2017	CVC Capital Partners VII, L.P.	12/4/2018	30,187,346	29,512,669	7,692,159	43,437,215	1.73x	23.3%	7.4%	15.9%
2017	Palladium Equity Partners V, L.P.	2/11/2019	6,666,667	4,249,374	1,159,402	4,427,212	1.31x	10.3%	11.8%	(1.5%)
2018	Vista Equity Partners Fund VII, L.P.	2/13/2019	35,500,000	31,900,490	3,387,741	37,192,522	1.27x	10.7%	7.8%	3.0%
2019	Welsh, Carson, Anderson & Stowe XIII, L.P.	3/14/2019	18,000,000	14,922,078	5,982,780	15,228,599	1.42x	26.1%	4.5%	21.6%
2018	Siris Partners IV, L.P.	3/15/2019	18,000,000	14,946,175	2,142,111	21,279,995	1.57x	18.8%	7.9%	10.9%
2018	Apollo Investment Fund IX, L.P.	3/15/2019	52,000,000	45,046,456	16,051,481	49,991,006	1.47x	25.0%	5.4%	19.6%
2018	ASF VIII B L.P.	3/15/2019	36,000,000	19,001,395	4,637,339	23,887,998	1.50x	25.3%	9.9%	15.5%
2019	ASF VIII B NYC Co-Invest L.P.	3/15/2019	18,000,000	7,610,192	1,573,291	10,490,753	1.59x	39.3%	4.9%	34.4%
2019	Warburg Pincus Global Growth, L.P.	3/26/2019	25,500,000	22,322,960	184,875	30,743,572	1.39x	15.1%	5.0%	10.0%
2018	Bridgepoint Europe VI	4/1/2019	23,605,887	19,765,826	2,051,094	28,543,279	1.55x	23.0%	8.5%	14.6%
2019	Bridgepoint Europe VI Co-Invest	5/7/2019	5,951,757	4,536,403	-	7,284,738	1.61x	19.9%	9.6%	10.3%
2019	Trilantic Capital Partners VI (North America) L.P.	8/8/2019	20,000,000	18,103,321	1,795,921	24,117,955	1.43x	19.7%	4.4%	15.4%
2019	NYCFPF - 2019 Emerging Manager Program6	9/25/2019	41,050,000	11,722,420	1,180,934	18,394,656	1.67x	26.7%	7.9%	18.8%
2019	Lexington Capital Partners IX	12/20/2019	21,375,000	17,050,981	4,607,564	20,626,420	1.48x	30.9%	3.7%	27.2%
2019	Lexington IX Co-Invest	9/29/2020	7,125,000	3,491,606	1,428,728	4,479,979	1.69x	37.9%	1.1%	36.8%
2019	Platinum Equity Capital Partners V, L.P.	12/27/2019	32,000,000	32,680,964	5,099,575	43,249,069	1.48x	25.4%	(0.1%)	25.5%
2021	Platinum Equity Capital Partners V Co-Investment, L.P.	7/1/2021	8,000,000	7,893,183	1,212,429	14,743,327	2.02x	NM	NM	N/A
2019	KKR European Fund V (USD)	1/15/2020	17,650,000	15,272,152	2,947,179	15,329,310	1.20x	10.0%	6.5%	3.5%
2020	FTV VI	3/18/2020	3,500,000	3,436,046	402,005	5,468,486	1.71x	31.0%	5.1%	25.9%
2019	Lindsay Goldberg V	4/29/2020	18,000,000	8,969,064	2,455,579	9,887,819	1.38x	26.4%	4.4%	22.1%
2019	Blackstone Capital Partners VIII L.P.	5/19/2020	22,500,000	12,773,157	748,879	14,054,337	1.16x	12.5%	(2.3%)	14.8%
2020	Clearlake Capital Partners VI, L.P.	5/22/2020	11,000,000	11,130,613	921,401	16,544,516	1.57x	28.9%	2.4%	26.6%
2020	Green Equity Investors VIII, L.P.	10/19/2020	22,500,000	19,608,674	182,294	22,224,634	1.14x	8.8%	(2.0%)	10.8%
2020	Green Equity Investors VIII Coinvest N, L.P.	5/20/2020	7,500,000	5,370,720	-	6,402,286	1.19x	9.6%	1.9%	7.7%

New York City Fire Pension Fund
Private Equity Portfolio
As of March 31, 2023 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR[1]	PME Return[2]	PME Spread[3]
2019	Crestview Partners IV, L.P.	10/28/2020	14,000,000	7,905,593	2,269,553	9,574,078	1.50x	41.4%	1.0%	40.4%
2019	Crestview Partners IV (Co-Investment), L.P.	10/28/2020	4,666,667	2,635,197	873,903	3,611,973	1.70x	57.0%	1.8%	55.1%
2019	Apax X USD L.P.	11/10/2020	21,500,000	17,303,001	1,352,453	20,037,955	1.24x	19.8%	0.5%	19.3%
2020	Valor Equity Partners V, L.P.	1/28/2021	5,500,000	5,002,156	13,238	6,864,816	1.38x	NM	NM	N/A
2020	EQT IX (No. 2) USD SCSP	2/5/2021	21,018,000	20,631,614	2,039,842	22,509,709	1.19x	NM	NM	N/A
2020	EQT IX Co-Investment	4/12/2021	5,732,000	5,691,125	95,576	5,863,486	1.05x	NM	NM	N/A
2020	Hg Genesis 9, L.P.	3/2/2021	11,319,368	9,192,357	1,906,664	8,801,868	1.16x	NM	NM	N/A
2021	Stellex Capital Partners II	4/22/2021	12,000,000	7,417,568	451,087	7,546,201	1.08x	NM	NM	N/A
2021	Grain Communications Opportunity Fund III, L.P.	4/30/2021	5,000,000	3,173,990	12,090	2,916,106	0.92x	NM	NM	N/A
2020	NYC-NorthBound Emerging Managers Program LP	5/5/2021	25,000,000	8,410,985	143,372	11,679,112	1.41x	NM	NM	N/A
2020	KKR Asian Fund IV SCSp	5/27/2021	25,000,000	9,045,726	69,250	9,070,688	1.01x	NM	NM	N/A
2021	One Rock Capital Partners III, L.P.	6/1/2021	9,500,000	7,063,716	972,517	8,092,840	1.28x	NM	NM	N/A
2021	Warburg Pincus Financial Sector II, L.P.	7/26/2021	19,500,000	7,538,887	-	9,720,145	1.29x	NM	NM	N/A
2020	BC Partners Fund XI	7/30/2021	24,200,000	10,471,548	59,325	11,122,712	1.07x	NM	NM	N/A
2021	BC Partners XI Metro Co-Investment L.P.	4/13/2021	11,000,000	7,140,432	-	8,258,355	1.16x	NM	NM	N/A
2021	Harbourvest Centre Street Co-Investment Fund L.P.	8/12/2021	39,000,000	20,910,501	-	20,787,616	0.99x	NM	NM	N/A
2021	CVC Capital Partners VIII, L.P.	8/16/2021	37,898,059	21,756,429	126,577	23,360,537	1.08x	NM	NM	N/A
2021	Insight Partners XII Buyout Annex Fund, L.P.	8/25/2021	10,000,000	6,350,000	-	5,792,129	0.91x	NM	NM	N/A
2021	Insight Partners XII	8/27/2021	30,000,000	20,836,492	33,152	17,934,404	0.86x	NM	NM	N/A
2021	The Resolute Fund V, L.P.	9/7/2021	16,500,000	13,767,637	143,059	20,538,683	1.50x	NM	NM	N/A
2021	Vistria Fund IV, L.P.	10/14/2021	11,000,000	8,122,098	155,043	8,345,800	1.05x	NM	NM	N/A
2021	Providence Strategic Growth V L.P.	12/23/2021	50,000,000	21,483,376	1,601,346	21,251,564	1.06x	NM	NM	N/A
2022	FTV VII	1/14/2022	23,831,980	9,056,152	-	8,934,146	0.99x	NM	NM	N/A
2022	FTV VII Co-Invest	3/21/2022	5,362,200	1,569,829	-	1,567,758	1.00x	NM	NM	N/A
2021	Clearlake Capital Partners VII, L.P.	4/26/2022	40,000,000	20,549,378	974	21,290,148	1.04x	NM	NM	N/A
2021	KKR North America Fund XIII, L.P.	5/5/2022	40,000,000	13,407,765	-	12,518,727	0.93x	NM	NM	N/A
2021	Reverence Capital Partners V (PE Fund III), L.P.	6/7/2022	10,000,000	2,243,523	16,275	2,039,987	0.92x	NM	NM	N/A
2021	Reverence III Side Car	6/7/2022	4,000,000	818,551	6,509	818,463	1.01x	NM	NM	N/A
2022	Thoma Bravo XV	6/10/2022	30,000,000	16,100,885	6,500	16,008,531	0.99x	NM	NM	N/A
2022	Thoma Bravo XV Co-Invest	6/10/2022	10,000,000	5,235,193	-	5,113,802	0.98x	NM	NM	N/A
2022	Lexington Capital Partners X Co-Invest	6/29/2022	10,000,000	1,971,737	-	2,400,196	1.22x	NM	NM	N/A
2022	Lexington Capital Partners X	N/A	30,000,000	-	-	991,847	-	NM	NM	N/A
2022	Hg NYC Co-Invest	6/30/2022	6,666,667	2,186,433	-	2,435,964	1.11x	NM	NM	N/A
2022	Hg Saturn 3	7/5/2022	13,333,333	134,064	-	296,867	2.21x	NM	NM	N/A
2022	Hg Genesis 10	9/23/2022	18,963,590	243,071	-	225,719	0.93x	NM	NM	N/A
2021	Apax Digital Fund II, L.P.	11/10/2022	12,000,000	428,099	-	89,375	0.21x	NM	NM	N/A
2022	EQT X	12/2/2022	30,000,000	501,699	501,699	(264,452)	0.47x	NM	NM	N/A
2022	EQT X Co-Invest	12/9/2022	10,000,000	1,820,538	-	1,811,142	0.99x	NM	NM	N/A
2022	Platinum Equity Capital Partners VI, L.P.	12/12/2022	35,250,000	2,348,641	-	1,852,655	0.79x	NM	NM	N/A
2022	Platinum Equity Capital Partners VI Co-Invest	N/A	11,750,000	-	-	-	-	NM	NM	N/A
2022	Welsh, Carson, Anderson & Stowe XIV, L.P.	12/27/2022	30,000,000	2,713,377	-	1,778,356	0.66x	NM	NM	N/A
2022	Welsh, Carson, Anderson & Stowe XIV, L.P. Side Car	N/A	10,000,000	-	-	-	-	NM	NM	N/A
2022	Permira VIII	3/30/2023	31,446,726	4,801,455	-	4,610,352	0.96x	NM	NM	N/A
2023	Vista Equity Partners Fund VIII, L.P.	3/28/2023	30,000,000	4,044,077	-	3,562,703	0.88x	NM	NM	N/A
2023	Vista Co-Invest Fund 2022-4, L.P.	3/31/2023	10,000,000	2,067,595	-	2,067,687	1.00x	NM	NM	N/A
2023	Valor Equity Partners VI, L.P.	3/31/2023	12,500,000	2,170,141	-	1,877,956	0.87x	NM	NM	N/A
2022	Green Equity Investors IX, L.P.	N/A	30,000,000	-	-	(53,495)	-	NM	NM	N/A
2022	Green Equity Investors IX Co-Invest	N/A	10,000,000	-	-	-	-	NM	NM	N/A
2022	Raine Partners IV	N/A	7,333,333	-	-	(210,813)	-	NM	NM	N/A
2022	Nordic Capital XI	N/A	20,213,546	-	-	(217,274)	-	NM	NM	N/A
2022	Nordic Capital XI Co-Invest	N/A	8,893,960	-	-	-	-	NM	NM	N/A
2022	Apax XI	N/A	40,000,000	-	-	(356,389)	-	NM	NM	N/A
2022	KKR European Fund VI (USD)	N/A	12,000,000	-	-	(185,740)	-	NM	NM	N/A
2023	Bridgepoint Europe VII	N/A	13,580,624	-	-	(232,809)	-	NM	NM	N/A
2023	Bridgepoint Europe VII Co-Invest	N/A	6,792,186	-	-	-	-	NM	NM	N/A
2023	Apollo Investment Fund X, L.P.	N/A	30,000,000	-	-	(474,860)	-	NM	NM	N/A
2023	Apollo Fund X NYC Sidecar Co-Invest, L.P.	N/A	10,000,000	-	-	-	-	NM	NM	N/A
Total Portfolio[7]			**$ 3,436,553,432**	**$ 2,706,603,958**	**$ 2,628,984,616**	**$ 1,708,796,877**	**1.60x**	**12.3%**	**10.4%**	**2.0%**

[1] Performance for funds with less than eight (8) quarters of activity is not meaningful.

[2] Russell 3000 PME+ or Long-Nickels PME for investments with no distributed capital as of quarter-end.

[3] PME Spread is calculated as IRR minus PME Return.

[4] NYCFPF - 2012 Emerging Manager Program includes the total commitment amount of $23.7 million. The Program's original commitment amount of $25.0 million was subsequently revised to $23.7 million, all of which has been committed. The remaining $1.3 million was reallocated to the NYCFPF - 2015 Emerging Manager Program.

[5] NYCFPF - 2015 Emerging Manager Program includes the total commitment amount of $26.3 million. The Program's original commitment amount of $31.3 million, which included the original $30.0 million commitment and the $1.3 million

reallocation from the NYCFPF - 2012 Emerging Manager Program, was subsequently revised to $26.3 million. All $26.3 million has been committed, and the remaining $5.1 million was reallocated to the NYCFPF - 2019 Emerging Manager Program.

[6] NYCFPF - 2019 Emerging Manager Program commitment amount totals $41.1 million, which includes the Program's original $36.0 million commitment and the $5.1 million reallocation from the NYCFPF - 2015 Emerging Manager Program. As of March 31 2023, $20.5 million has been committed.

[7] Total Portfolio includes liquidated investments.

Past performance is not necessarily indicative of future results and there can be no assurance that the fund will achieve comparable results or avoid substantial losses.

The referenced indices are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

Note: IRRs presented are interim estimates and may not be indicative of the ultimate performance of fund investments due to a number of factors, such as the lack of industry valuation standards and the differences in the investment pace and strategy of various funds. Until a fund is liquidated, typically over 10 to 12 years, the IRR is only an interim estimated return. The IRR calculated in early years of a fund is not meaningful given the J-curve effect. The actual IRR performance of any fund is not known until all capital contributed and earnings have been distributed to the investor. The IRRs contained in this report are calculated by StepStone Group LP ("StepStone"), a consultant to the New York City Fire Pension Fund, based on information provided by the general partners (e.g. cash flows and valuations). The IRR calculations and other information contained in this report have not been reviewed or confirmed by the general partners. The result of the IRR calculation may differ from that generated by the general partner or other limited partners. Differences in IRR calculations can be affected by cash-flow timing, the accounting treatment of carried interest, fund management fees, advisory fees, organizational fees, other fund expenses, sale of distributed stock, and valuations. IRR and TVPI for certain vehicles may have been impacted by Stepstone's or the underlying GPs' use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

New York City Fire Pension Fund
Subsequent Commitments
As of March 31, 2023 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Multiple	IRR[1]	PME Return[2]	PME Spread[3]
Commitments Closed Subsequent to as of Date										
2023	ASF IX B L.P.	N/A	$ 16,800,000	-	-	-	N/A	N/A	N/A	N/A
2023	ASF IX B NYC Co-Invest L.P.	N/A	25,200,000	-	-	-	N/A	N/A	N/A	N/A
2023	New 2ND Capital Fund III, L.P.	N/A	3,000,000	-	-	-	N/A	N/A	N/A	N/A
2023	New 2ND Capital N Sidecar, L.P.	N/A	1,500,000	-	-	-	N/A	N/A	N/A	N/A
2023	Clayton, Dubilier & Rice Fund XII, L.P.	N/A	40,000,000	-	-	-	N/A	N/A	N/A	N/A
Total Commitments Closed Subsequent to as of Date			**$ 86,500,000**	**$ -**	**$ -**	**$ -**	**N/A**	**N/A**	**N/A**	**N/A**

[1] Performance for funds with less than eight (8) quarters of activity is not meaningful.

[2] Russell 3000 PME+ or Long-Nickels PME for investments with no distributed capital as of quarter-end.

[3] PME Spread is calculated as IRR minus PME Benchmark.

Note: IRRs presented are interim estimates and may not be indicative of the ultimate performance of fund investments due to a number of factors, such as the lack of industry valuation standards and the differences in the investment pace and strategy of various funds. Until a fund is liquidated, typically over 10 to 12 years, the IRR is only an interim estimated return. The IRR calculated in early years of a fund is not meaningful given the J-curve effect. The actual IRR performance of any fund is not known until all capital contributed and earnings have been distributed to the investor. The IRRs contained in this report are calculated by StepStone Group LP ("StepStone"), a consultant to the New York City Fire Pension Fund, based on information provided by the general partners (e.g. cash flows and valuations). The IRR calculations and other information contained in this report have not been reviewed or confirmed by the general partners. The result of the IRR calculation may differ from that generated by the general partner or other limited partners. Differences in IRR calculations can be affected by cash-flow timing, the accounting treatment of carried interest, fund management fees, advisory fees, organizational fees, other fund expenses, sale of distributed stock, and valuations. IRR and TVPI for certain vehicles may have been impacted by Stepstone's or the underlying GPs' use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

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Quarterly Private Equity Market Overview

For the Period Ended March 31, 2023 | Confidential

IMPORTANT INFORMATION

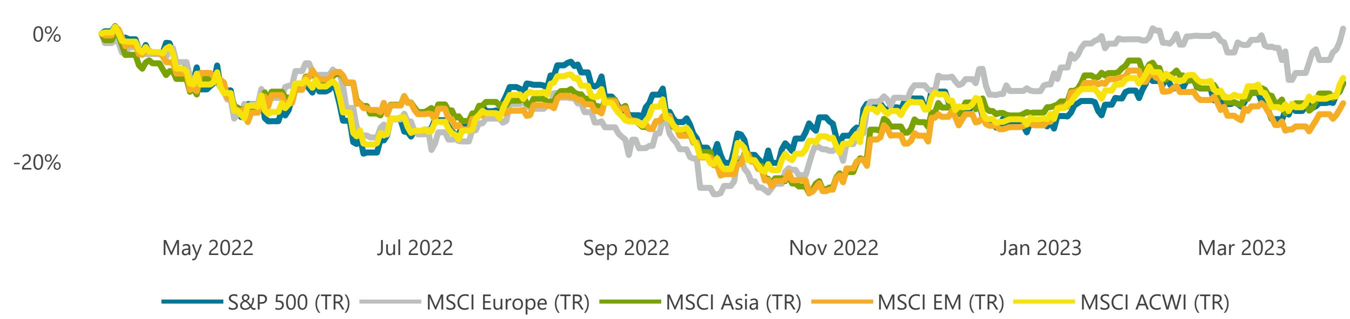
Table of Contents

I. Capital Markets Overview

Public Equity Markets

US equity markets whipsawed throughout Q1 2023 but were up overall along with global equities markets as recession concerns saw some dissipation on the back of relative optimism during the quarter around inflation and central bank policy. International equities gained in the first quarter of 2023, on the heels of a weaker US Dollar and less hawkish signals from central bank officials at the time. Emerging markets, while positive for the quarter, lagged developed market equities. Despite the reopening of China's economy, US-China tensions have escalated, followed by a loss of confidence in regional US (failure of SVB) and European banks, which brought returns down. Amongst equities, the technology sector was the top performer, bolstered by prospects during the quarter of a less aggressive monetary policy, which revitalized interest in growth stocks. Conversely, the financial sector trailed behind, due to pressures faced by regional banks. Attention during the quarter remained on inflation and central bank policy – early in the year, consensus was that a recession was likely at some point in 2023; however, economic data has been mixed (e.g., tight labor market, inverted yield curve, inflation metrics), suggesting a higher-for-longer Fed policy. This uncertainty, along with macro events, have led to continued volatility in the market with the VIX ending the quarter above the 10-year average.

1 - Year Global Public Indices Returns



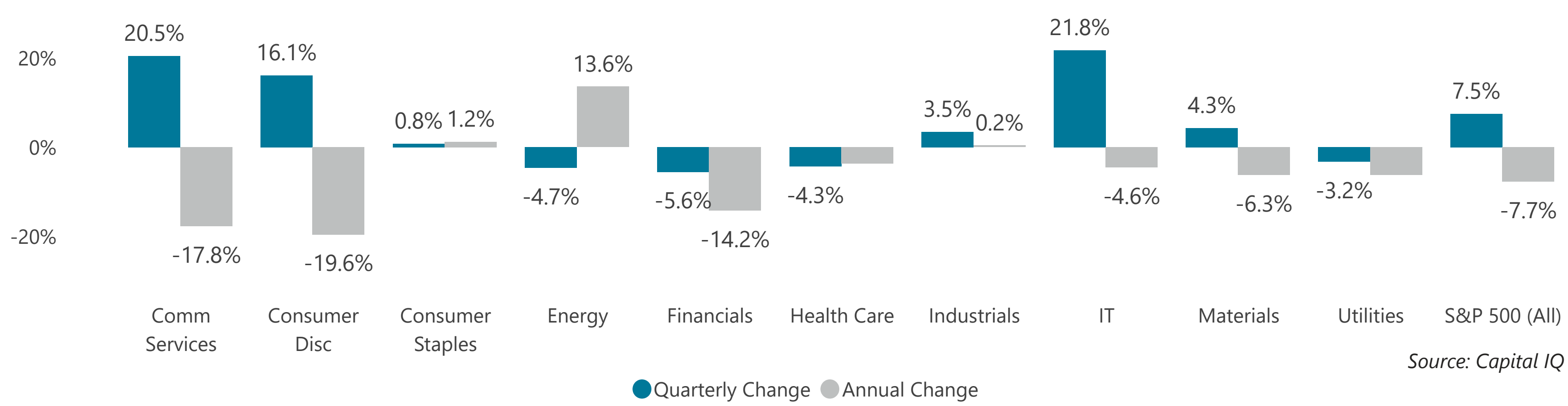
Source: Capital IQ

	3 Mo	1 Yr	3 Yr	5 Yr	10 Yr
MSCI Asia (TR)	5.1%	-7.9%	7.4%	0.8%	4.8%
MSCI Europe (TR)	10.7%	0.8%	15.7%	5.0%	6.0%
MSCI EM (TR)	4.0%	-10.9%	8.2%	-0.5%	2.4%
MSCI ACWI (TR)	7.4%	-7.0%	15.9%	7.5%	8.6%
S&P 500	7.0%	-9.3%	16.7%	9.2%	10.1%
S&P 500 (TR)	7.5%	-7.7%	18.6%	11.2%	12.2%

Source: Capital IQ

** Returns for time periods greater than one year are annualized.*

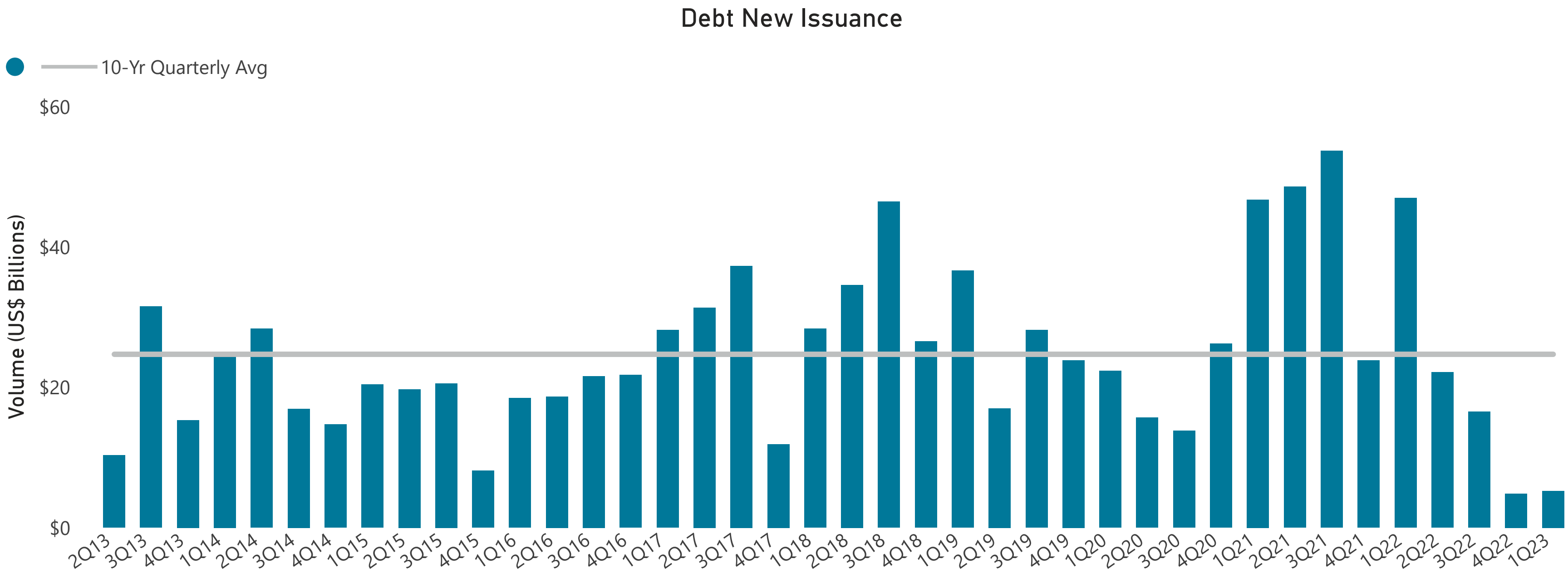
S&P 500 Performance by Industry



Source: Capital IQ

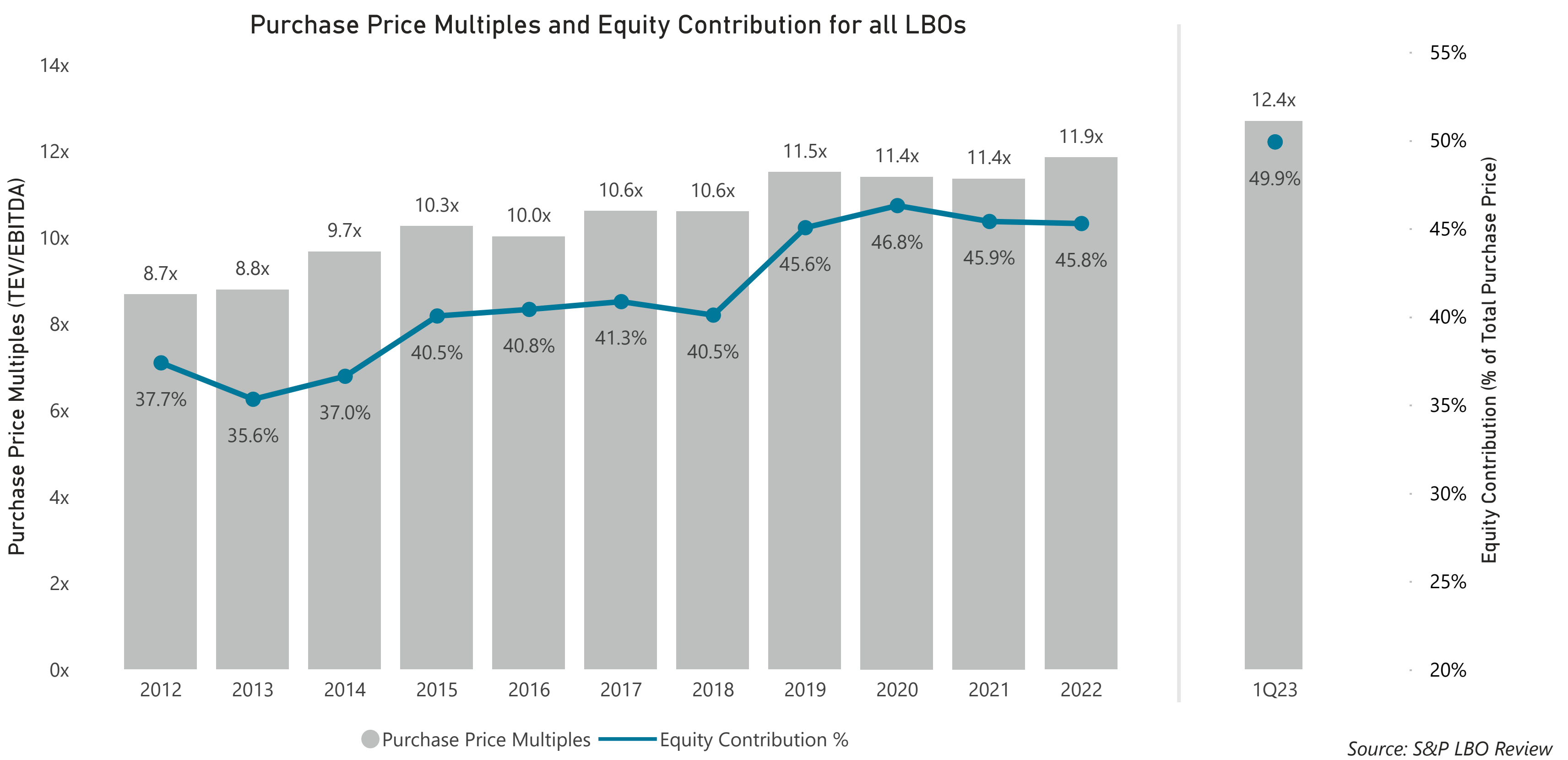
Debt Markets

US LBO debt volume totaled US$5.3 billion during Q1 2023, 8% more than the previous quarter and 89% less than Q1 2022. Q1 volume is 79% lower than the 10-year quarterly average of US$24.7 billion. The following chart shows the quarterly volume of US LBO new loan issuance for the past ten years.



Source: S&P Global Market Intelligence, Total US LBO Loan Volume

The following chart compares purchase price multiples and equity contribution percentages for U.S. LBO deals.

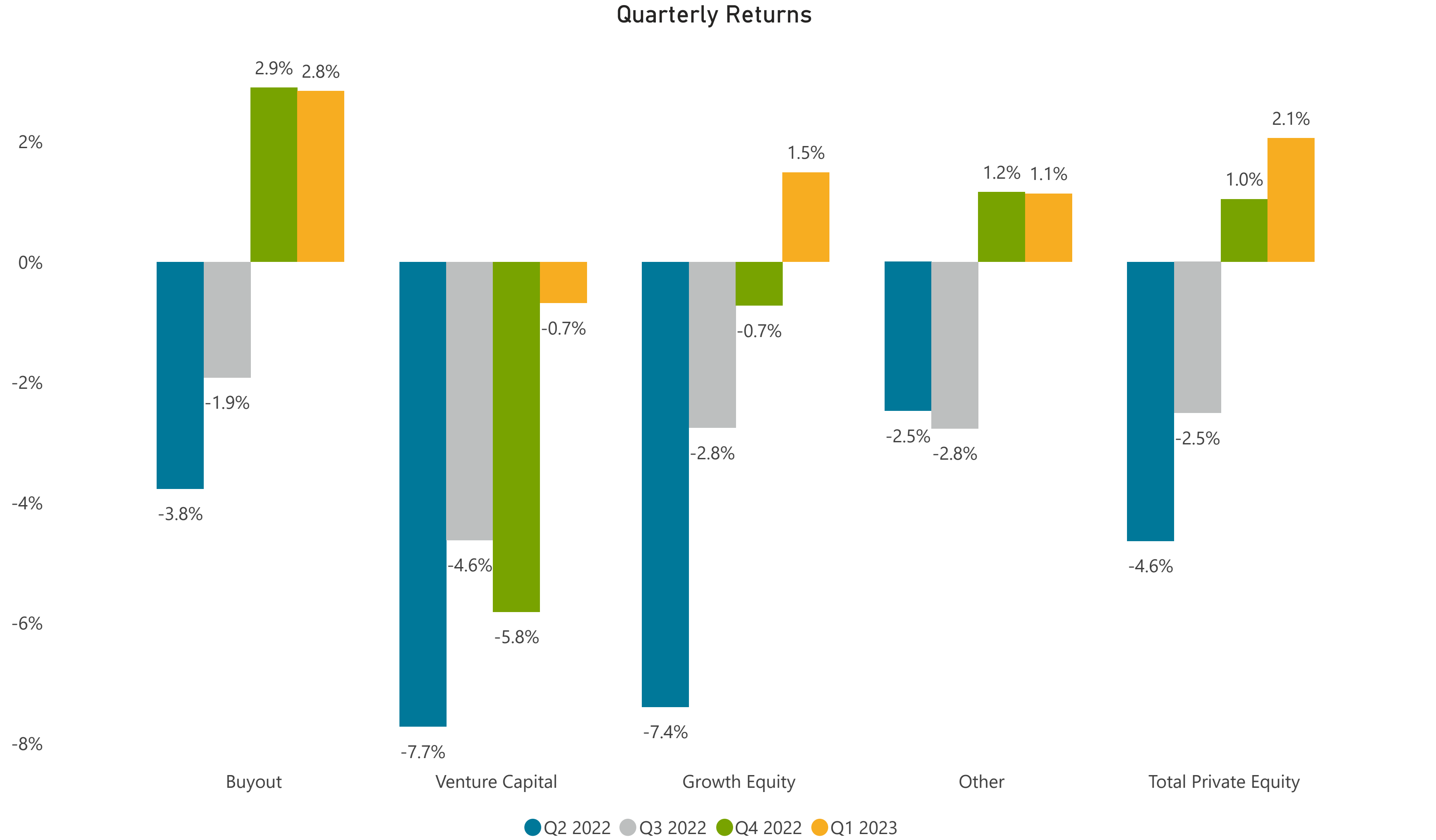


Source: S&P LBO Review

II. Private Equity Market Overview

Private Equity Performance

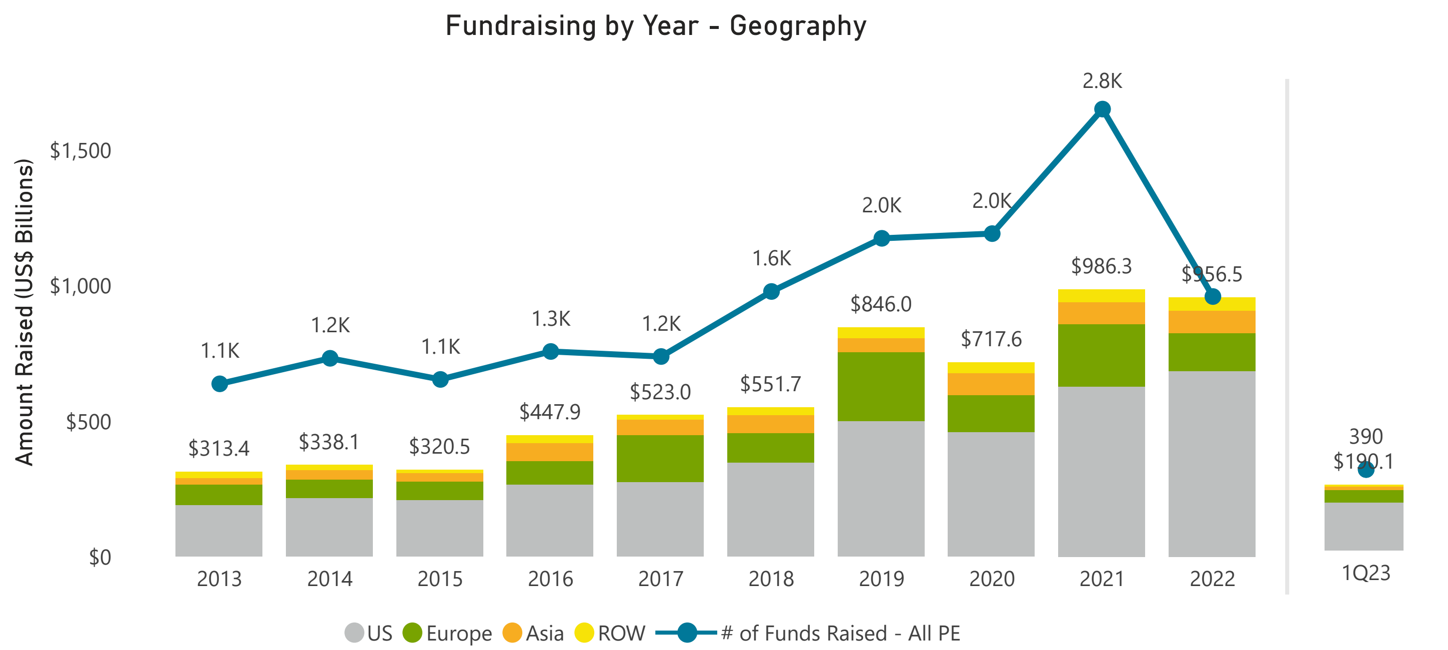
Private equity returns for Q1 2023 ended the quarter up 2.1% compared to only 1.0% the prior quarter. Buyout funds continued to post the highest quarterly performance, generating a gain of 2.8% during the quarter.



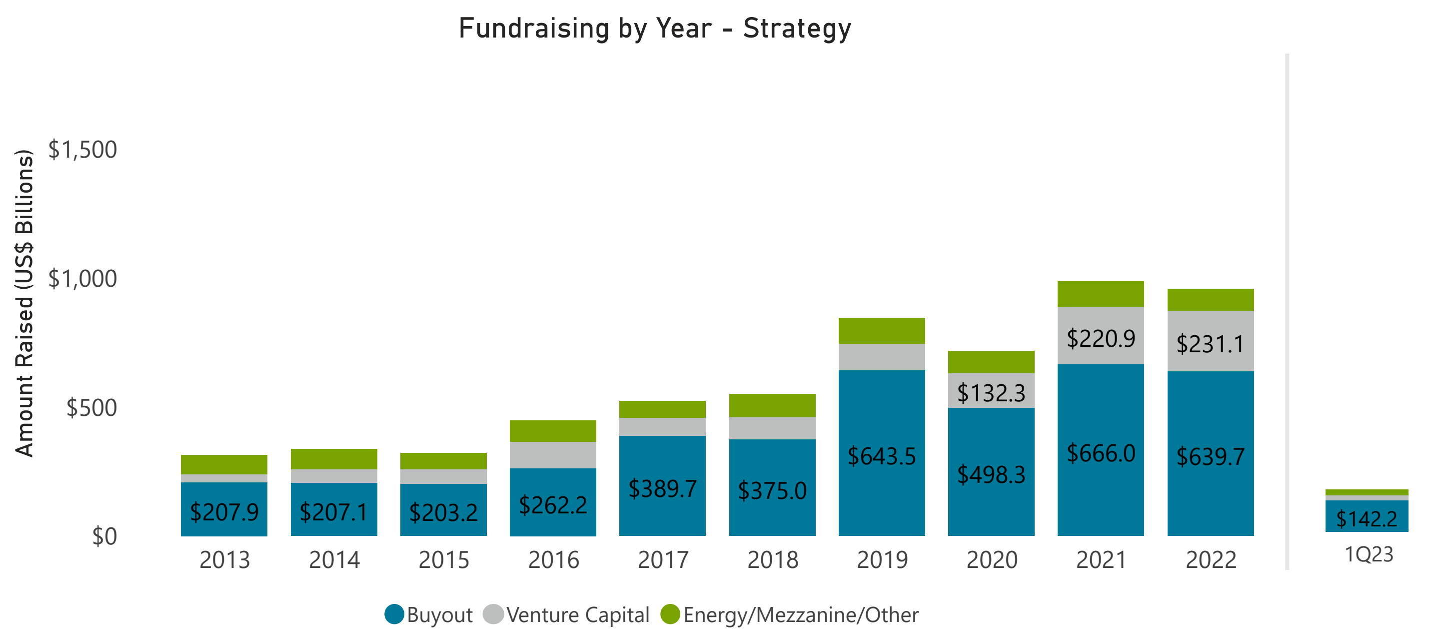
Source: StepStone Portfolio Analytics & Reporting ("SPAR") Omni Universe Benchmark Composite. SPAR data is continuously updated; values are subject to change. Based on latest available NAVs reported as of March 31, 2023.

Fundraising

Global private equity fundraising totaled US$190.1 billion during Q1 2023, 6% less than the previous quarter and 23% less than Q1 2022. Buyout fundraising, which represented 75% of the total amount raised for the quarter, totaled US$142.2 billion, a decrease of 5% from the prior quarter and 1% compared to the prior year period. Venture Capital raised US$22.0 billion in Q1, a decrease of 28% quarter-over-quarter and a decrease of 75% compared to Q1 2022. The charts below depict annual private equity fundraising activity by geography and strategy.



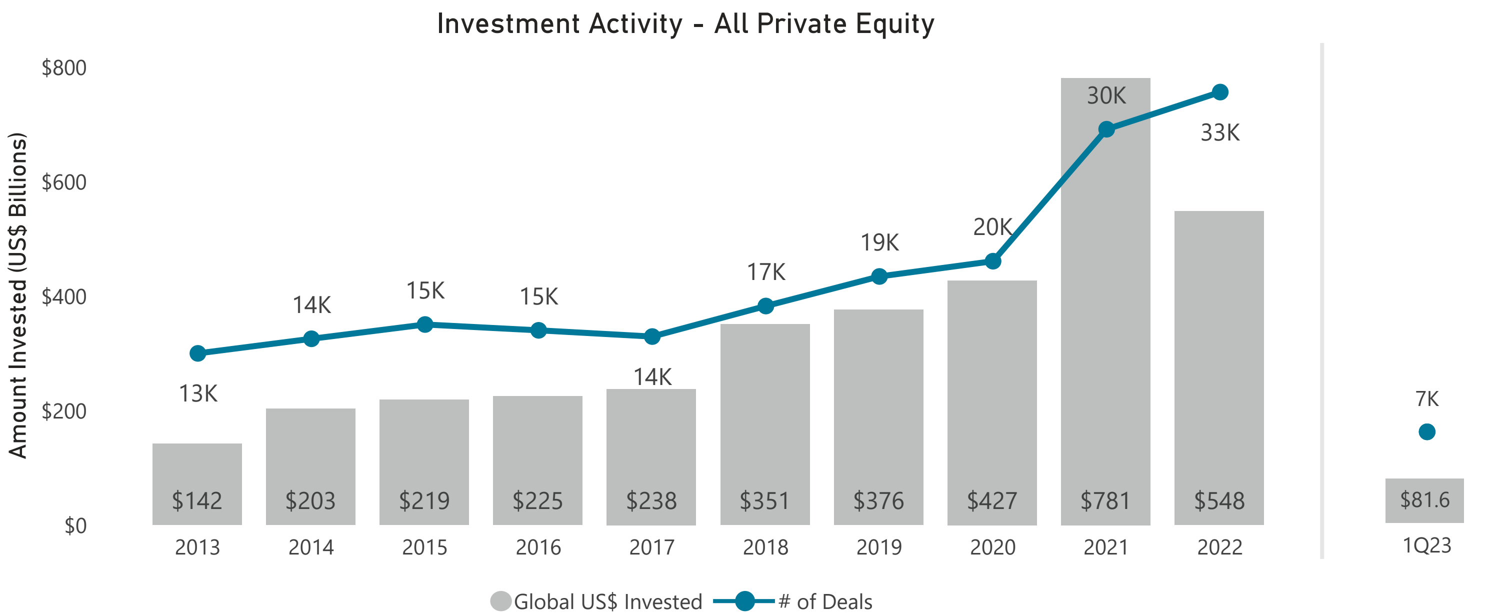
Source: Refinitiv



Source: Refinitiv

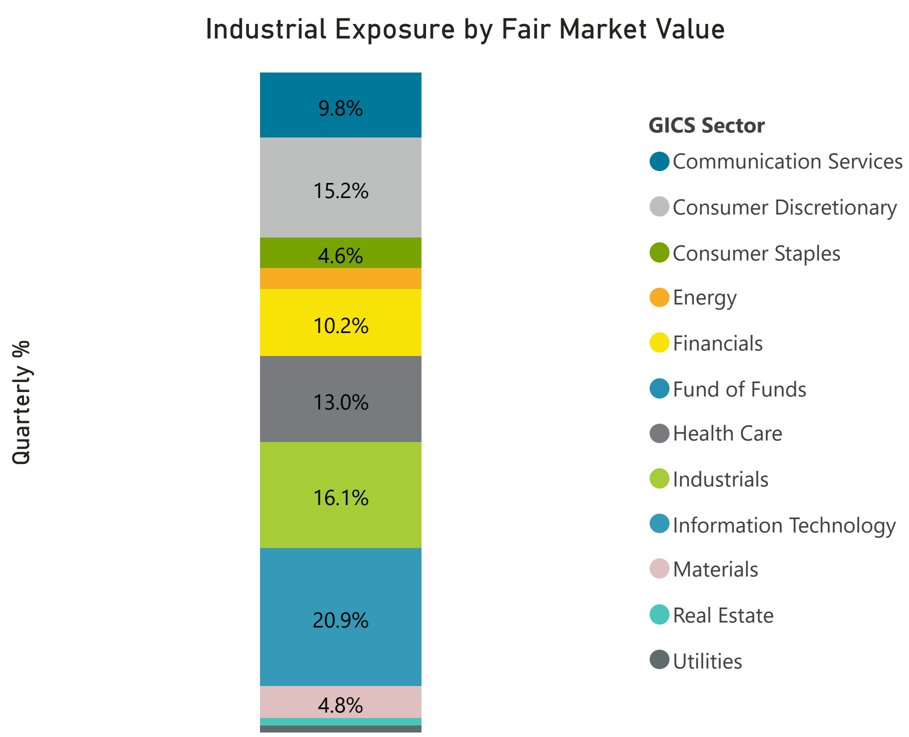
Investment Activity

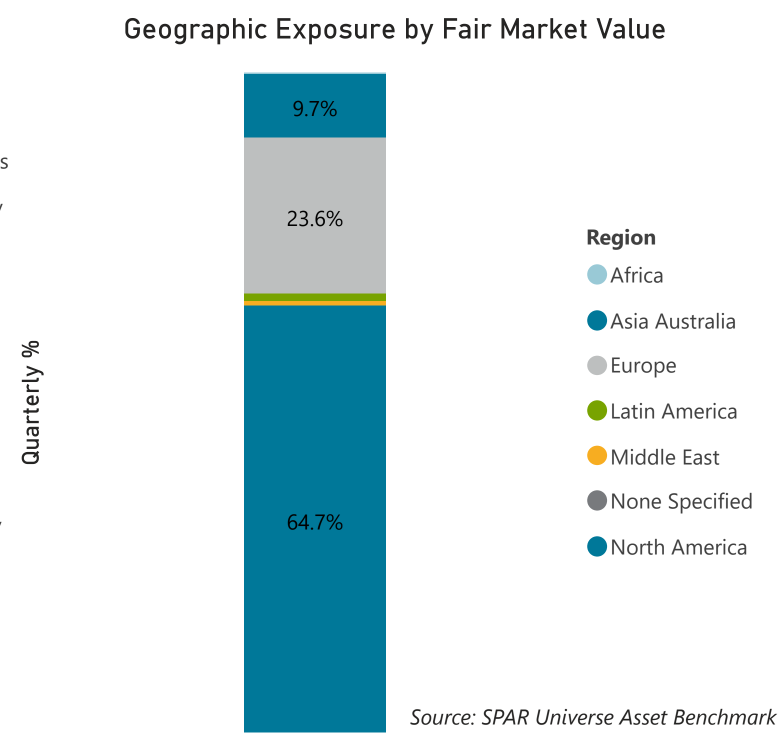
Private equity funds invested US$81.6 billion during Q1 2023, representing a quarter-over-quarter decrease of 32% and a decrease of 58% from Q1 2022. The average investment size during the quarter was US$10.9 million, a decrease of 55% compared to the average investment size of US$24.3 million in Q1 2022.



Source: Refinitiv

The graphs below depict the percentage of exposed market value by industry and geography as of Q1 2023. Companies operating in Information Technology accounted for 21% of total market value exposed. Geographically, North America comprised 65% of total market value exposed with European investments accounting for 24%.

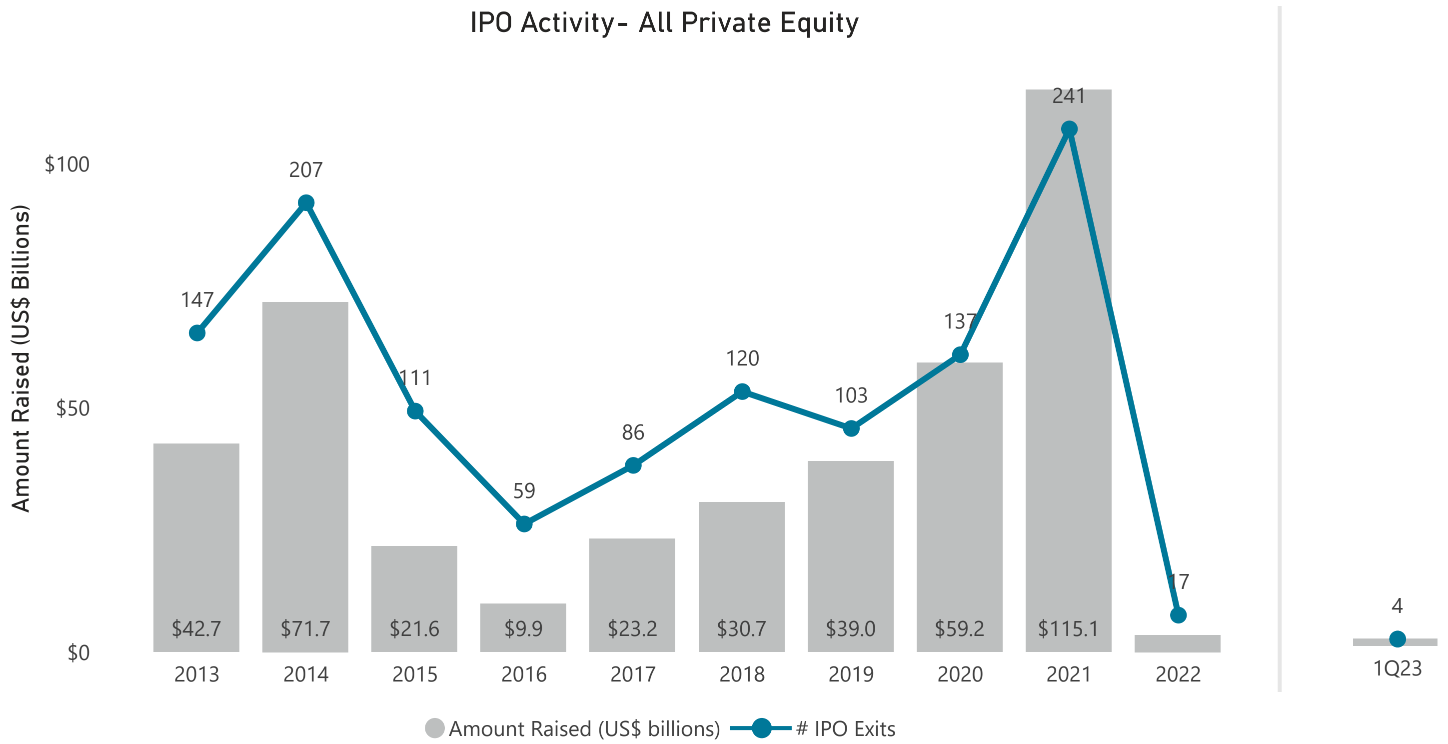




Source: SPAR Universe Asset Benchmark

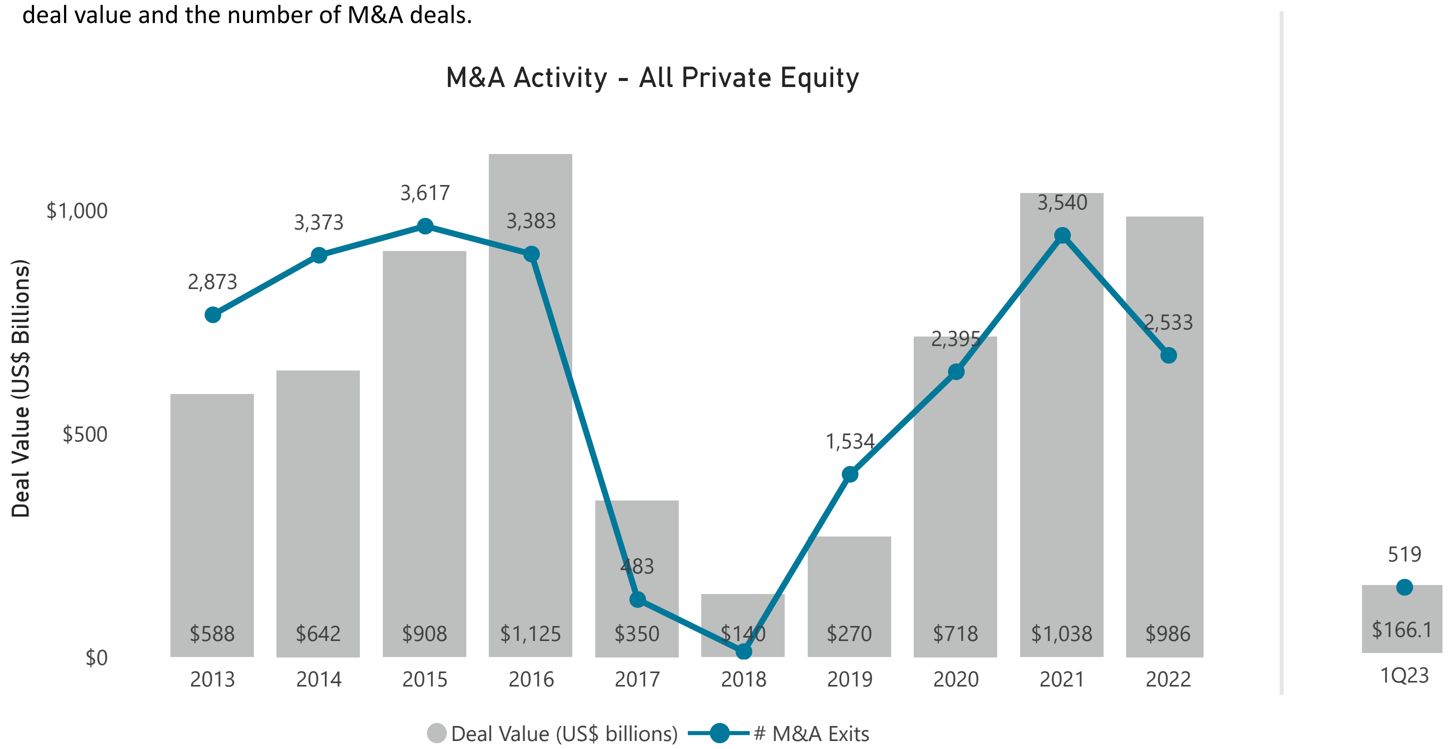
Exit Environment

The largest Initial Public Offering ("IPO") during Q1 2023 was completed by NEXTracker Inc. (NASDAQ: NXT) in February, which raised US$638 million.



Source: Refinitiv

The largest private equity-backed Mergers and Acquisitions M&A ("M&A") deals of the quarter were the US$13.8 billion acquisition of Store Capital, LLC by GIC Real Estate, Inc. and Oak Street Real Estate Capital, LLC and the US$9.1 billion acquisition of Coupa Software, Inc. by Abu Dhabi Investment Authority and Thoma Bravo. Together these deals represented 13.8% of the total value for all deals during the quarter. The graph below shows the deal value and the number of M&A deals.



Source: Capital IQ

RISK AND CONSIDERATIONS

Risks Associated with Investments. Identifying attractive investment opportunities and the right underlying fund managers is difficult and involves a high degree of uncertainty. There is no assurance that the investments will be profitable and there is a substantial risk that losses and expenses will exceed income and gains.

Restrictions on Transfer and Withdrawal; Illiquidity of Interests; Interests Not Registered. The investment is highly illiquid and subject to transfer restrictions and should only be acquired by an investor able to commit its funds for a significant period of time and to bear the risk inherent in such investment, with no certainty of return. Interests in the investment have not been and will not be registered under the laws of any jurisdiction. Investment has not been recommended by any securities commission or regulatory authority. Furthermore, the aforementioned authorities have not confirmed the accuracy or determined the adequacy of this document.

Limited Diversification of Investments. The investment opportunity does not have fixed guidelines for diversification and may make a limited number of investments.

Reliance on Third Parties. StepStone will require, and rely upon, the services of a variety of third parties, including but not limited to attorneys, accountants, brokers, custodians, consultants and other agents and failure by any of these third parties to perform their duties could have a material adverse effect on the investment.

Reliance on Managers. The investment will be highly dependent on the capabilities of the managers.

Risk Associated with Portfolio Companies. The environment in which the investors directly or indirectly invests will sometimes involve a high degree of business and financial risk. StepStone generally will not seek control over the management of the portfolio companies in which investments are made, and the success of each investment generally will depend on the ability and success of the management of the portfolio company.

Uncertainty Due to Public Health Crisis. A public health crisis, such as the recent outbreak of the COVID-19 global pandemic, can have unpredictable and adverse impacts on global, national and local economies, which can, in turn, negatively impact StepStone and its investment performance. Disruptions to commercial activity (such as the imposition of quarantines or travel restrictions) or, more generally, a failure to contain or effectively manage a public health crisis, have the ability to adversely impact the businesses of StepStone's investments. In addition, such disruptions can negatively impact the ability of StepStone's personnel to effectively identify, monitor, operate and dispose of investments. Finally, the outbreak of COVID-19 has contributed to, and could continue to contribute to, extreme volatility in financial markets. Such volatility could adversely affect StepStone's ability to raise funds, find financing or identify potential purchasers of its investments, all of which could have material and adverse impact on StepStone's performance. The impact of a public health crisis such as COVID-19 (or any future pandemic, epidemic or outbreak of a contagious disease) is difficult to predict and presents material uncertainty and risk with respect to StepStone's performance.

Taxation. An investment involves numerous tax risks. Please consult with your independent tax advisor.

Conflicts of Interest. Conflicts of interest may arise between StepStone and investors. Certain potential conflicts of interest are described below; however, they are by no means exhaustive. There can be no assurance that any particular conflict of interest will be resolved in favor of an investor.

Allocation of Investment Opportunities. StepStone currently makes investments, and in the future will make investments, for separate accounts having overlapping investment objectives. In making investments for separate accounts, these accounts may be in competition for investment opportunities.

Existing Relationships. StepStone and its principals have long-term relationships with many private equity managers. StepStone clients may seek to invest in the pooled investment vehicles and/or the portfolio companies managed by those managers.

Carried Interest. In those instances where StepStone and/or the underlying portfolio fund managers receive carried interest over and above their basic management fees, receipt of carried interest could create an incentive for StepStone and the portfolio fund managers to make investments that are riskier or more speculative than would otherwise be the case. StepStone does not receive any carried interest with respect to advice provided to, or investments made on behalf, of its advisory clients.

Other Activities. Employees of StepStone are not required to devote all of their time to the investment and may spend a substantial portion of their time on matters other than the investment.

Material, Non-Public Information. From time to time, StepStone may come into possession of material, non-public information that would limit their ability to buy and sell investments.

ESG Integration. While StepStone seeks to integrate certain ESG factors into its investment process and firm operations, there is no guarantee that StepStone's ESG strategy will be successfully implemented or that any investments or operations will have a positive ESG impact. Applying ESG factors to investment decisions involves qualitative and subjective decisions and there is no guarantee the criteria used by Stepstone to formulate decisions regarding ESG, or StepStone's judgment regarding the same, will be reflected in the beliefs or values of any particular client or investor. There are significant differences in interpretation of what constitutes positive ESG impact and those interpretations are rapidly changing. The description of ESG integration herein is provided to illustrate Stepstone's intended approach to investing and firm operations; however, there is no guarantee that the processes will be followed in every circumstance or at all.

Performance Information. No investment decisions may be made in reliance on this document. In considering performance information herein, readers should bear in mind that past performance is not necessarily indicative of future results and that actual results may vary. There can be no assurance that any Stepstone fund will be able to successfully implement its investment strategy or avoid losses. Performance shown herein may include investments across different Stepstone funds. The aggregate returns are not indicative of the returns an individual investor would receive from these investments. No individual investor received such aggregate returns as the investments were made across multiple funds and accounts over multiple years.

Real Estate Quarterly Report (Public):

The New York City Fire Department Pension Fund

Executive Summary: First Quarter 2023 Performance Measurement Report
Real Estate

Portfolio Profile

The New York City Fire Department Pension Fund has allocated 7.0% of the total plan to Real Estate. The Real Estate Portfolio's objective is to generate a total net return that exceeds the NFI-ODCE+100 bps total net return measured over full market cycles.

Portfolio Statistics (as of March 31st, 2023)

Total Plan Assets	$18.3 billion
Target Real Estate Allocation (%)	7%
Target Real Estate Allocation ($)	$1.3 billion
Total Real Estate Market Value	$1.1 billion
Real Estate Unfunded Commitments	$528.0 million
Total Real Estate Exposure	$1.7 billion
Number of Investments	95
Number of Managers	48

Net Returns (as of March 31st, 2023)

1Q23 Time-Weighted Net Return:	-1.7%
1 Year Time Weighted Net Return:	-1.8%
3 Year Time Weighted Net Return:	12.6%
5 Year Time Weighted Net Return:	9.4%
Inception-to-Date (ITD) Time-Weighted:	7.9%
ITD Net IRR:	8.7%
ITD Net Equity Multiple:	1.4x

Investment Guidelines

Style Sector:	Target •3.0% Core/Core Plus •4.0% Non-Core
Benchmark	NFI-ODCE Index + 100 bps net over full market cycles
Region Diversification	Maximum 25% Int'l
Investment Diversification	Limit 15% to a single investment
Manager Diversification	Limit 20% to a single manager
Leverage	65%

First Quarter Investment Activity

During the Quarter, the Board approved a $25 million commitment to Rialto Real Estate Fund V-debt, a closed-end non-core opportunistic debt fund.

OVERVIEW

Headwinds related to elevating interest rates, stringent lending standards, and a looming moderate recession remain present entering 2023. Year over year, deal volumes have contracted by 52% with capital markets activity hampered by uncertainty. These difficulties crystalized in the US, in which two of the largest bank collapses in history were felt throughout the property markets. The resulting $66 B in capital invested in commercial real estate priced at $10M or greater was the lowest since Q3 2020, amid the pandemic.

US markets endured relative to the EMEA region, whose deal volume fell to its lowest since 2012. YOY Transaction activity in the U.K. was down 60%, in Germany by 76% and in France by 43%. Pockets of encouragement can be seen with large retail warehouse and grocery-anchored properties trading. This further illuminates the resilience and preference for the asset type which emerged during the pandemic.

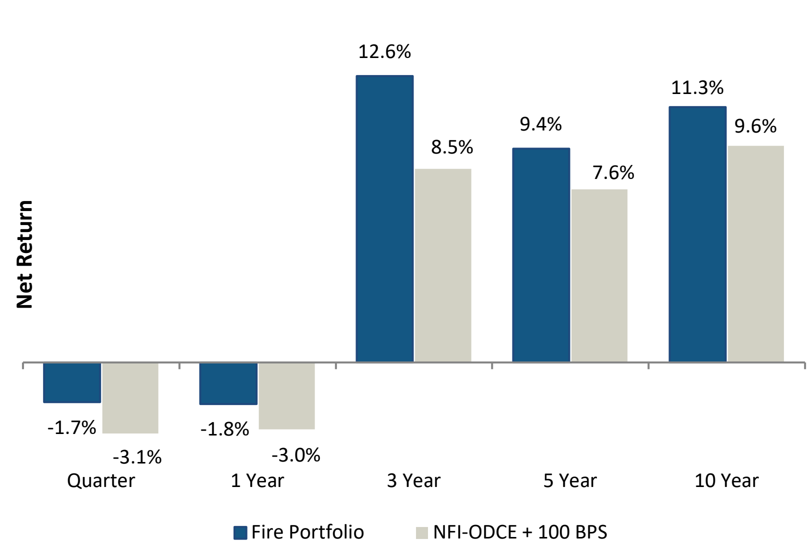
Global Total Commercial Real Estate Volume - 2022 - 2023

$ US Billions	Q1 2023	Q1 2022	% Change Q1 23 - Q1 22	Full Year Ending 1Q23	Full Year Ending 1Q22	% Change Full Year
Americas	78	186	-58%	579	877	-34%
EMEA	38	105	-64%	266	474	-44%
Asia Pacific	95	148	-36%	795	903	-12%
Total	211	439	-52%	1639	2254	-27%

Source: Real Capital Analytics, Inc., Q1' 23

The New York City Fire Department Pension Fund ("Fire") Real Estate Portfolio is, and has been, well positioned to take advantage of conditions in the real estate marketplace. In the period reflected in the rolling ten-year net return, Fire performance outperforms the benchmark by 170 basis points. At the end of the First Quarter 2023, the Portfolio achieved a total gross return of -1.7% which was comprised of 0.6% income and -2.3% appreciation. The net return for the Quarter was -1.7%. A detailed analysis of the Portfolio's real estate performance is found later in this Executive Summary.

Performance vs. Benchmark



FUNDING AND COMPOSITION

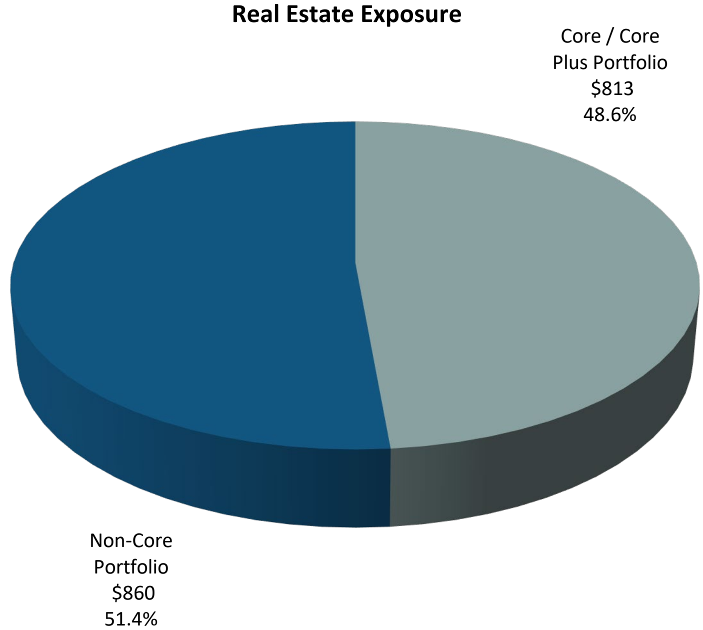
At the end of the First Quarter , the Portfolio was funded at $1.1 billion, or 6.3% of total plan assets. A total of $528.0 million in unfunded commitments are still outstanding. Unfunded commitments are up by $9.4 million as of the Fourth Quarter 2022.

New contributions for the Quarter totaled $30.1 million, offset by $28.4 million in distributions and withdrawals. Total distributions were weighted to the Non-Core sector.

Shown in the pie chart to the right is the current risk sector exposure calculated by Market Value + Unfunded Commitments. The Core / Core Plus component accounts for 48.6% of the Portfolio exposure during the Quarter. The Non-Core component accounts for 51.4% of the Portfolio exposure.

A more detailed break-down of the Portfolio Composition is shown in the table below. Attached as Exhibit A is a matrix which demonstrates compliance with various Investment Policy Statement guidelines.

Real Estate Exposure



New York City Fire Department Pension Fund		
Total Plan Assets	3/31/2023	18,317
Real Estate Allocation (%)		7.0
Real Estate Allocation ($)		1,282
Real Estate Core Allocation (%)		3.0
Real Estate Core Allocation ($)		550
Real Estate Non-Core Allocation (%)		4.0
Real Estate Non-Core Allocation ($)		733
Style Sector Allocation		
Funded (Market Value) Core / Core Plus Portfolio ($)		727
Funded (Market Value) Non-Core Portfolio ($)		418
Unfunded Core / Core Plus Portfolio		86
Unfunded Non-Core Portfolio		442
Funded (Market Value) and Committed Statistics		
Core / Core Plus Portfolio (%)		48.6
Non-Core Portfolio (%)		51.4
Core / Core Plus Committed ($)		813
Non-Core Committed ($)		860
$ Committed		1673
% Committed on Real Estate Allocation		130.5
% Committed on Total Plan Assets		9.1
Funded (Market Value) Statistics		
% Core / Core Plus Funded (Market Value) of Total Plan Assets		4.0
% Non-Core Funded (Market Value) of Total Plan Assets		2.3
% Funded (Market Value) of Total Plan Assets		6.3
% Funded (Market Value) of Total Real Estate Allocation		89.3

The New York City Fire Department Pension Fund

Executive Summary: First Quarter 2023 Performance Measurement Report

Real Estate

PERFORMANCE

During the Quarter under review, the Fire Real Estate Portfolio produced a -1.7.% total gross return. The total net return for the Quarter was -1.7%. On a rolling one-year basis, the total gross return of -1.4% was recorded. On a net basis, the total return was -1.8%. On both a gross and net basis, the Fire Portfolio meets or exceeds the NFI-ODCE over the one, three, five, and ten-year time periods. The benchmark return contemplates a 100-bps premium over the ODCE net return over full market cycles. This benchmark is exceeded over the one, three, five, and ten-year time periods. The various components of the Portfolio returns are depicted in the chart below. Recent performance correlates to volatility and current market conditions. Despite negative performance this quarter, strong historical returns have been consistent across the portfolio. Outperformance relative to the benchmark is still driven by the portfolio's industrial and alternative property type investments.

Core/Core Plus

As of March 31, 2023, the market value of the Core/Core Plus Portfolio was $727.3 million, or 63.5% on an invested basis. On a funded and committed basis, the Core/Core Plus Portfolio totaled $812.0 million, or 48.6% of the total Portfolio. The Core / Core plus Portfolio generated a -2.8% total gross return for the Quarter comprised of 0.8% in income and -3.6% in appreciation. The total net return for the Quarter was -2.7%.

A significant contributor to the Quarterly return in this sector was Exeter Industrial Core Fund III, which generated a 1.0% total net return. A significant detractor from the Core / Core Plus Portfolio Cortland Partners Growth and Income Fund, which generated a -10.7% total net return.

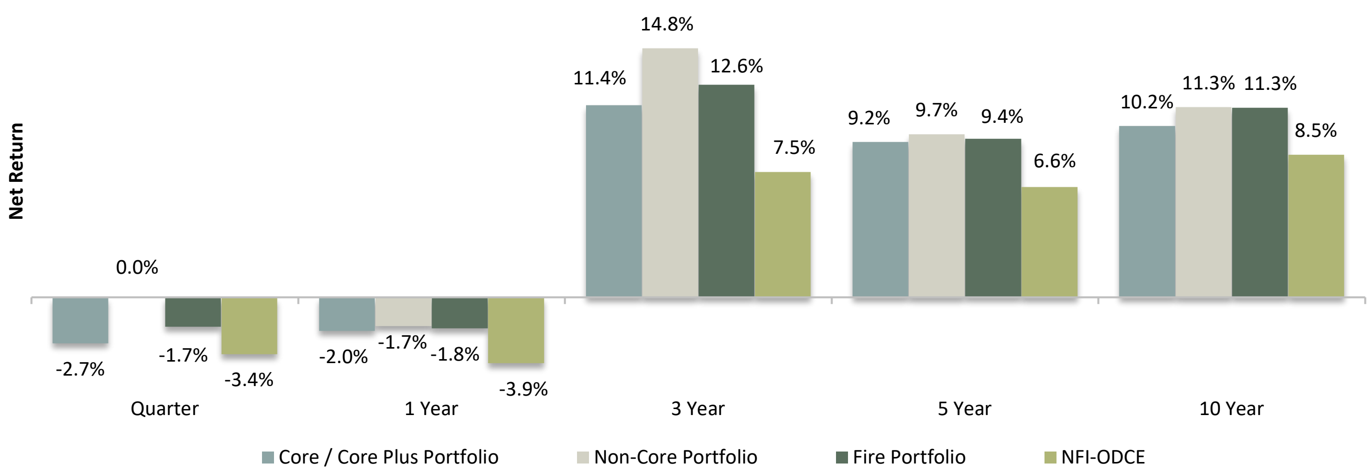
The Core / Core Plus Portfolio achieved a 11.4% net return over the three-year period ending March 31, 2023. Within the Core / Core Plus Funds, Lion Industrial Trust was a significant contributor, generating a 23.1% total net return. Jamestown Premier Property Fund was a significant detractor, generating a -17.0% total net return over the period.

Non-Core

As of March 31, 2023, the market value of the Non-Core Portfolio was $418.1 million, or 36.5% on an invested basis. On a funded and committed basis, the Non-Core Portfolio totaled $860.5 million, or 51.4% of the total Portfolio. The Non-Core Portfolio generated a 0.4% total gross return for the Quarter comprised of 0.2% in income and 0.1% in appreciation. The total net return for the Quarter was 0.0%.

A significant contributor to the Quarterly return in this sector was Brookfield Strategic Real Estate Partners III, which generated a 3.3% total net return. A significant detractor from the Non-Core Portfolio was KKR CMBS B-Piece SMA, which generated a -2.5% total net return.

The Non-Core Portfolio generated a three-year net return of 14.8%. Within the Non-Core Portfolio, Blackstone Real Estate Partners IX was a significant contributor, generating a 31.8% total net return. NYC Asset Investor #3 LLC was a significant detractor, generating a -5.2% total net return over the period.



PERFORMANCE

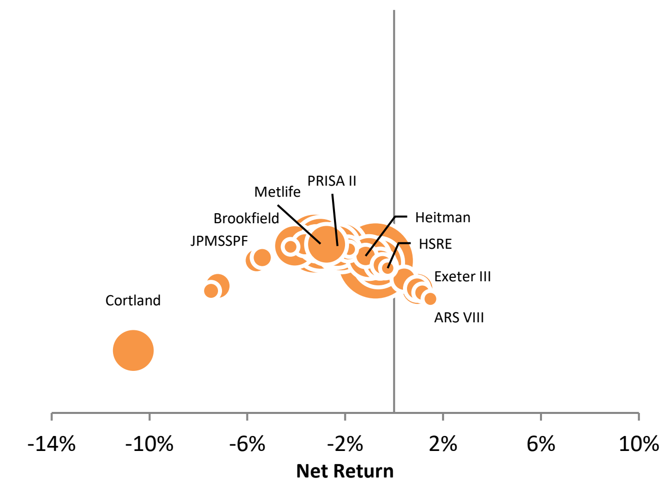
Portfolio Performance

At the end of the First Quarter, the Portfolio had a cumulative market value of $1.1 billion. Total market value plus unfunded commitments was $1.7 billion. During the Quarter, the Portfolio achieved a total gross return of -1.7% which was comprised of 0.6% in income and -2.3% in appreciation. The Portfolio achieved a total net return of -1.7%. Since inception, the Portfolio has a net IRR of 8.7% and an equity multiple of 1.4x as of March 31, 2023. Note, attached as Exhibit B are performance metrics relating to each investment within the Portfolio.

Brief reviews of select Funds are found below. Note, that attached as Exhibit C are charts relating to fund contributions to returns during different relevant periods.

Core/Core Plus	1-Year	3-Year	5-Year	S.I. IRR
Net Return	-2.0%	11.4%	9.2%	8.0%

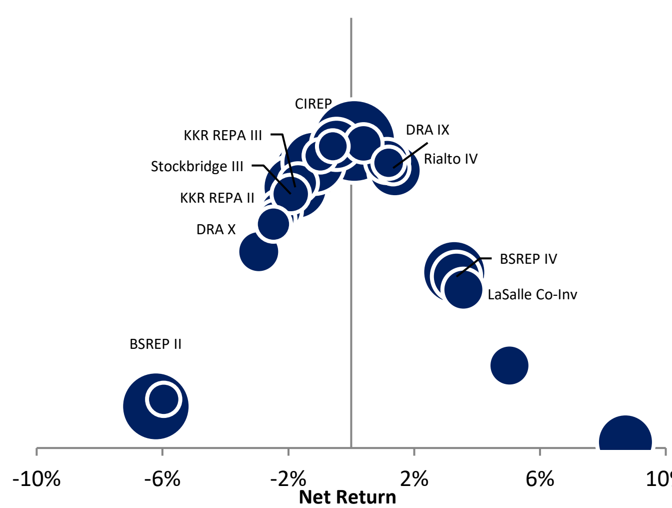
Core / Core Plus: Distribution of Quarterly Returns



Note: Bubble size based on Average Invested Capital. Due to scaling, the net return for Jamestown Premier Property Fund of -28.0% is not shown on the chart.

Non-Core	1-Year	3-Year	5-Year	S.I. IRR
Net Return	-1.7%	14.8%	9.7%	9.5%

Non-Core: Distribution of Quarterly Returns
(Top 25 Positions by NAV)



Note: Bubble size based on Average Invested Capital.

Blackstone Real Estate Partners Europe Fund VI. BREP Euro VI generated a total gross return of 6.4%. The net return after fees was 5.0%. Positive contributors to fund performance included a quarter-over-quarter appreciation increase as well as a result of strong operational performance from key assets held in the portfolio. As a result of strong disposition activity, the Fund has realized approximately €3.4 billion, or 58% of invested equity.

Brookfield Strategic Real Estate Partners III. BSREP III generated a total gross return of 4.4% comprised of 0.0% in income and -4.4% in appreciation. The net return after fees was 3.3%. The three-year net return is 15.6%. Valuation increases for certain investments were partially driven by continued stabilization of NOI and discount rate compression across certain assets in the portfolio in concentrated in markets with strong outperformance such as the western U.S.

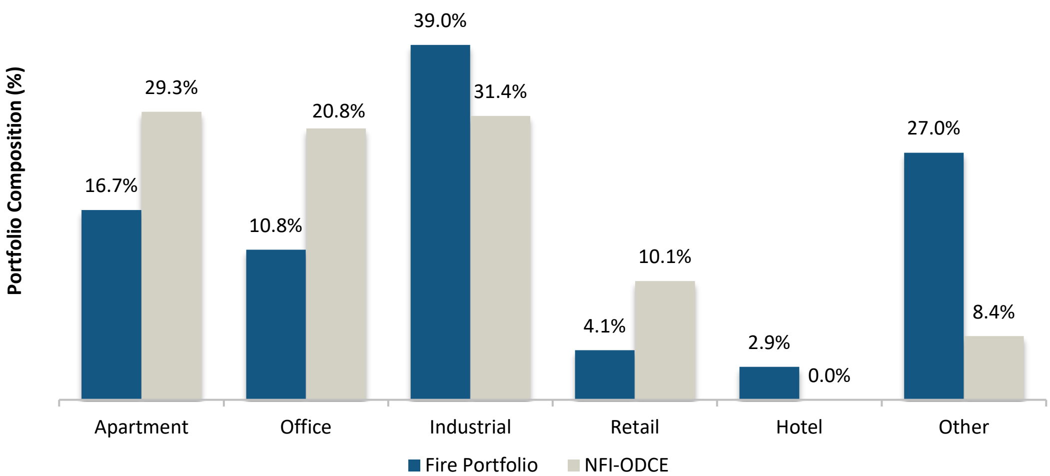
H/2 Special Opportunities Fund III. During the Quarter, H/2 Special Opportunities Fund III produced a total gross return of 9.0% comprised of 1.0% in income and 8.0% in appreciation. The net return after fees was 8.7%. Since its inception, Fund III has fully exited 38 investments, realizing a net IRR of 7.2%.

ElmTree U.S. Net Lease Fund IV. During the Quarter, ElmTree IV generated a total gross return of 12.6% comprised of 0.8% in income and 11.8% in appreciation. The net return after fees was 10.9%. During the Quarter, the Fund closed on the sale of seventeen properties. ElmTree projects continued growth in e-commerce sales, onshoring of supply chain operations, and a shift towards higher inventory levels which will continue to drive tenant demand for industrial space. Since inception, the Fund has produced a 20.9% net IRR.

PROPERTY TYPE DIVERSIFICATION

The diversification of the current Portfolio by property type is shown below and compared to the diversification of the NFI-ODCE at the end of the Quarter. Relative to the ODCE, the Portfolio is underweight to multifamily, office, and retail. The Portfolio is overweight to industrial, hotel and other property types which includes debt-related investments and non-traditional property types such as for sale residential, self storage, land, data centers, senior living, healthcare, medical office and student housing.

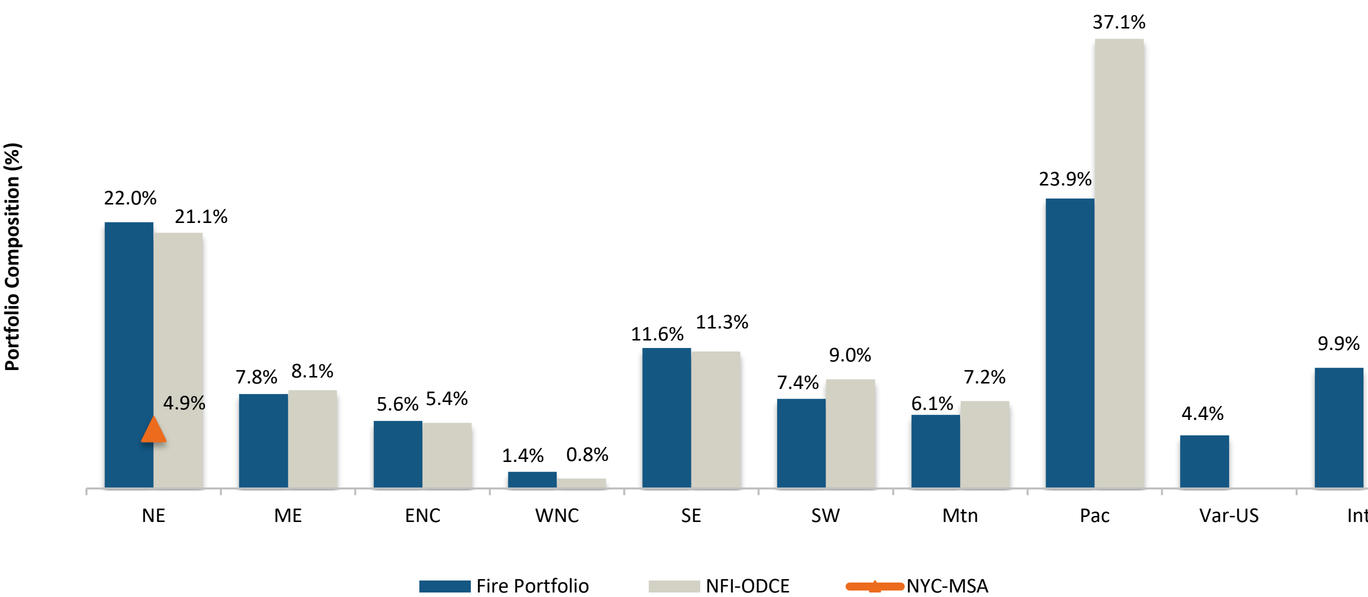
Property Type Diversification



GEOGRAPHIC DIVERSIFICATION

The diversification of the current funded Portfolio by geographic region is shown below and compared to the diversification of the NFI-ODCE at the end of the Quarter. The ODCE is a US-only index. The domestic portion of the Portfolio is well diversified relative to the ODCE. The 9.9% international exposure is appropriate for the risk and return profile of Fire and consistent with the long-term target. Exposure to the NYC MSA is also included, which stands at 4.9% as of March 31, 2023.

Geographic Diversification



MARKET UPDATE

General

- The economy continues to face headwinds stemming from an increasingly aggressive federal funds rate, continuous inflation, and geopolitical events. The S&P 500 has returned a positive quarter coming in at 7.5% despite the underperformance in 2022. The MSCI US REIT index continued its upward trend after a challenging 2022, posting a gross first quarter return of 2.8%.

- During the first quarter, GDP increased at an annualized rate of 1.1%. This positive growth was primarily due to government spending, consumer spending, and strong job market growth. As a result of geopolitical events such as the atrocities of the Russia-Ukraine war, Saudi-Iranian oil concerns, and increased protectionist measures, commodity pricing has remained elevated in tandem with persistent inflation, which may persist throughout 2023. Federal reserve officials remain committed to taming inflation and reducing the central bank's balance sheet for the foreseeable future, approving seven interest rate hikes throughout 2022, and two in the first quarter of 2023 totaling an increase of 500 basis points since March 2022.

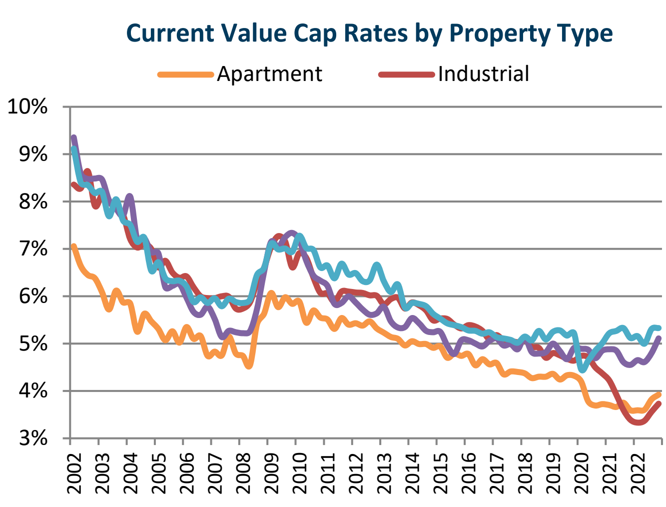
Commercial Real Estate

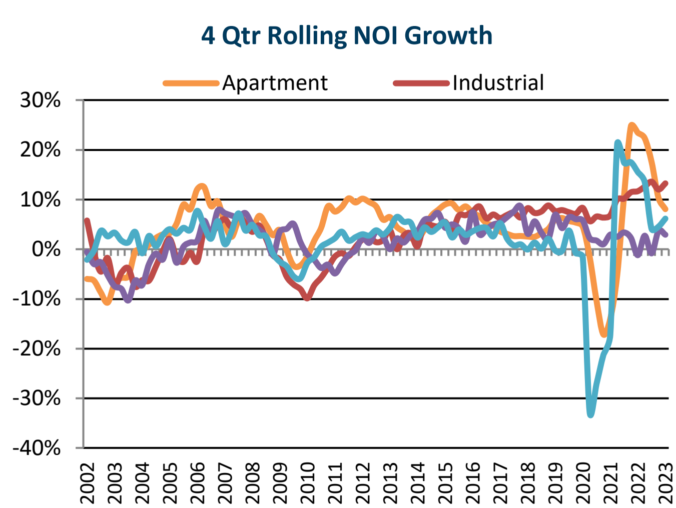
- To start off 2023, total CRE transaction activity for the quarter decreased by -56% YoY, with annual transaction activity down -32% YoY. The office sector transaction volumes in the U.S. have notably not recovered to pre-pandemic levels. Although the office sector has seen minor improvements, transaction volumes for the office sector in the U.S. have continued to fall due to the increase in the cost of debt and loose return to office requirements.

- Transaction cap rates (5.6%) continued to expand, moving out 77 bps during the quarter. This increase comes after historic low cap rates experienced in 4Q21 and 2Q22. Current valuation cap rates expanded for all major property sectors, led by office (+31 bps), and followed by industrial (+17 bps), apartment (+10 bps) and retail (+2 bps).

- NOI growth has continued to diverge between property sectors. Apartment sector fundamentals continue to show strength. With the cost of debt for homes continuing to become more expensive, Apartment NOI expanded (+8%) YoY. Industrial NOI expanded (+13%) YoY on the back of companies' investments in direct-to-customer distribution.

- 10-year treasury bond yields declined slightly, ending the quarter at 3.5%. As economists expected, rates moved significantly higher throughout the first quarter of 2023, with the potential to climb further.





Sources: Bureau of Economic Analysis, U.S. Census Bureau, St. Louis Fed, NCREIF, Real Capital Analytics, Bloomberg LP., Preqin.

EXHIBIT A: COMPLIANCE MATRIX

Category	Requirement	Portfolio Status
Benchmark	NFI-ODCE (net) +100 bps over full market cycles	*Portfolio returns outperform the benchmark over the one, three, five, and ten-year time periods.*
Portfolio Composition	Core/Core Plus (3% of RE Allocation)	*The portfolio is funded (market value) and committed at 130.5% of real estate allocation with a portfolio composition of 48.6% core/core plus and 51.4% non-core. Based on market value, the core/core plus portfolio is funded at 63.5% and the non-core portfolio is funded at 36.5%.*
	Non Core (4% of RE Allocation)	
Real Estate Allocation	Target of 7.0%	*Funded (market value) and committed dollars place the portfolio at 9.1% of total plan assets.*
	Currently Funded at 6.3%	
Property Type Diversification	Up to 40% Multifamily Up to 35% Industrial Up to 45% Office Up to 35% Retail Up to 25% Hotel Up to 20% Other Up to 15% Debt*	*The portfolio has a slight overweight (+4.0%) to the industrial property type and (+5.0%) to other property types driven by market views that favored the sector. Unfunded commitments are weighted to diversified strategies and will help increase exposure to multiple property types.*
Geographic Diversification	Diversified geographically Max 25% Ex-US	*All geographic type locations are in compliance based on market value.*
LTV	65%	*Portfolio is in compliance (44.2%).*
Manager Exposure	20% of real estate allocation	*Manager exposure is in compliance based on market value.*

**Debt has been established as a separate category with a 15% allocation in the Plan. For reporting purposes, debt investments are included in the "Other" category in the performance report.*

The New York City Fire Department Pension Fund

Executive Summary: First Quarter 2023 Performance Measurement Report

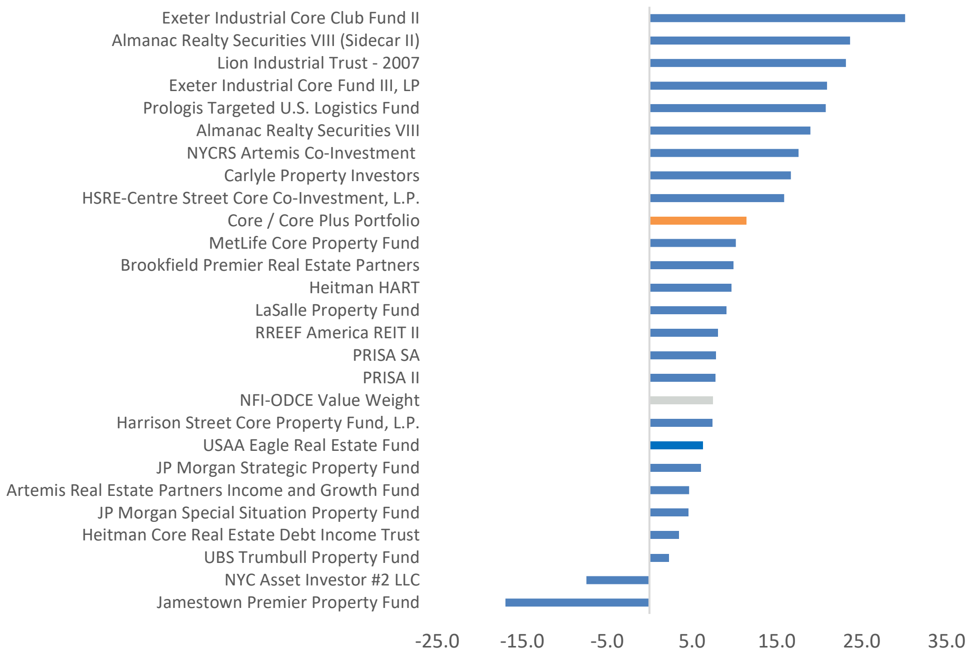
Real Estate

EXHIBIT B: First Quarter 2023 FOIL

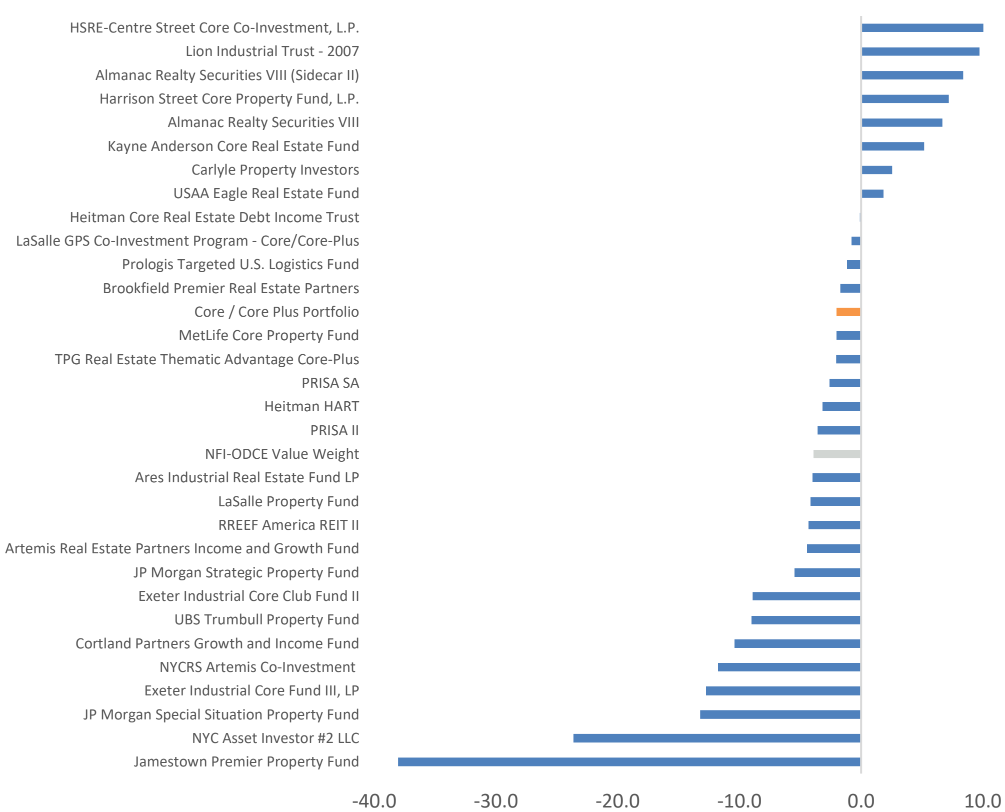
Vintage Year	Fund Name	Style Sector	Geographic Play	First Draw Down	Capital Committed	Contributions	Distributions	Market Value	Equity Multiple	Net IRR
2019	Almanac Realty Securities VIII	Core / Core Plus Portfolio	Developed Americas	12/21/2018	10,500,000	6,159,040	-1,237,988	6,295,876	1.2	12.1
2019	Almanac Realty Securities VIII (Sidecar II)	Core / Core Plus Portfolio	Developed Americas	12/21/2018	7,000,000	4,237,875	-999,984	4,728,265	1.4	18.4
2021	Ares Industrial Real Estate Fund LP	Core / Core Plus Portfolio	Developed Americas	9/30/2021	40,000,000	41,631,631	-1,631,631	49,427,164	1.2	15.2
2019	Artemis Real Estate Partners Income and Growth Fund	Core / Core Plus Portfolio	Developed Americas	10/18/2019	10,000,000	7,976,363	-2,089,514	6,103,489	1.0	1.8
2017	Brookfield Premier Real Estate Partners	Core / Core Plus Portfolio	Developed Americas	11/22/2016	19,000,000	25,522,905	-6,855,222	34,783,552	1.6	10.5
2017	Carlyle Property Investors	Core / Core Plus Portfolio	Developed Americas	7/3/2017	19,000,000	24,459,305	-5,692,919	35,653,078	1.7	12.3
2020	Cortland Partners Growth and Income Fund	Core / Core Plus Portfolio	Developed Americas	7/1/2020	25,000,000	28,162,555	-3,554,618	34,594,743	1.4	13.3
2022	EQT Exeter Industrial Core-Plus Fund IV, LP	Core / Core Plus Portfolio	Developed Americas	9/30/2022	50,000,000	4,820,000	0	4,210,823	0.9	-12.7
2016	Exeter Industrial Core Club Fund II	Core / Core Plus Portfolio	Developed Americas	5/20/2016	6,000,000	5,782,201	-2,493,758	11,295,383	2.4	20.8
2020	Exeter Industrial Core Fund III, LP	Core / Core Plus Portfolio	Developed Americas	2/19/2020	21,300,000	20,931,604	-2,297,453	22,420,836	1.2	9.7
2019	Harrison Street Core Property Fund, L.P.	Core / Core Plus Portfolio	Developed Americas	10/4/2019	6,700,000	7,951,150	-1,077,173	8,817,368	1.2	7.5
2019	Heitman Core Real Estate Debt Income Trust	Core / Core Plus Portfolio	Developed Americas	11/2/2018	8,000,000	10,268,551	-2,268,552	9,591,109	1.2	4.3
2007	Heitman HART	Core / Core Plus Portfolio	Developed Americas	3/29/2007	9,000,000	15,649,474	-21,695,416	10,551,956	2.1	7.8
2019	HSRE-Centre Street Core Co-Investment, L.P.	Core / Core Plus Portfolio	Developed Americas	5/28/2019	3,300,000	3,177,671	-309,378	4,199,691	1.4	14.0
2016	Jamestown Premier Property Fund	Core / Core Plus Portfolio	Developed Americas	2/4/2016	8,000,000	11,784,591	-4,770,926	5,176,542	0.8	-4.5
2007	JP Morgan Special Situation Property Fund	Core / Core Plus Portfolio	Developed Americas	1/2/2007	5,000,000	5,870,702	-2,787,659	7,930,047	1.8	4.7
2007	JP Morgan Strategic Property Fund	Core / Core Plus Portfolio	Developed Americas	12/5/2006	22,000,000	24,459,391	-33,282,569	23,328,478	2.3	7.5
2020	Kayne Anderson Core Real Estate Fund	Core / Core Plus Portfolio	Developed Americas	4/1/2020	10,000,000	11,279,989	-1,402,269	12,341,037	1.2	8.0
2021	LaSalle GPS Co-Investment Program - Core/Core-Plus	Core / Core Plus Portfolio	Developed Americas	8/17/2021	17,200,000	10,612,882	-448,166	10,956,125	1.1	6.6
2010	LaSalle Property Fund	Core / Core Plus Portfolio	Developed Americas	7/1/2010	48,000,000	48,000,000	-19,691,719	72,902,810	1.9	9.5
2017	Lion Industrial Trust - 2007	Core / Core Plus Portfolio	Developed Americas	1/1/2017	50,000,000	64,767,732	-14,053,271	116,698,348	2.0	20.4
2014	MetLife Core Property Fund	Core / Core Plus Portfolio	Developed Americas	7/1/2014	41,000,000	41,000,000	-9,784,536	55,008,773	1.6	9.7
2013	NYC Asset Investor #2 LLC	Core / Core Plus Portfolio	Developed Americas	7/9/2013	9,000,000	9,327,815	-3,770,524	5,567,798	1.0	0.0
2016	NYCRS Artemis Co-Investment	Core / Core Plus Portfolio	Developed Americas	2/24/2016	11,000,000	12,775,721	-16,772,703	3,548,293	1.6	16.6
2007	PRISA II	Core / Core Plus Portfolio	Developed Americas	6/30/2007	20,228,233	21,417,377	-10,834,188	36,017,793	2.2	6.2
2006	PRISA SA	Core / Core Plus Portfolio	Developed Americas	9/29/2006	7,000,000	7,530,220	-4,207,069	11,608,671	2.1	5.3
2006	Prologis Targeted U.S. Logistics Fund	Core / Core Plus Portfolio	Developed Americas	10/1/2006	35,000,000	36,745,383	-3,938,666	47,718,889	1.4	8.1
2006	RREEF America REIT II	Core / Core Plus Portfolio	Developed Americas	10/1/2006	7,000,000	9,178,399	-6,127,696	11,906,221	2.0	5.7
2022	TPG Real Estate Thematic Advantage Core-Plus	Core / Core Plus Portfolio	Developed Americas	3/30/2022	40,000,000	18,659,951	0	18,808,001	1.0	0.9
2006	UBS Trumbull Property Fund	Core / Core Plus Portfolio	Developed Americas	9/28/2006	27,000,000	41,453,456	-50,831,969	13,646,634	1.6	6.2
2016	USAA Eagle Real Estate Fund	Core / Core Plus Portfolio	Developed Americas	12/1/2015	30,000,000	30,000,000	-9,013,481	31,502,600	1.4	6.5
	Core / Core Plus Portfolio				**622,228,233**	**611,593,934**	**-243,921,017**	**727,340,393**	**1.6**	**8.0**
2019	AERMONT Real Estate Fund IV	Non-Core Portfolio	Developed Europe	4/18/2019	10,271,627	7,129,484	0	5,866,028	0.8	-10.0
2008	AG Realty Fund VII	Non-Core Portfolio	Developed Americas	5/20/2008	15,000,000	14,066,700	-21,201,546	24,903	1.5	12.5
2023	Almanac Realty Securities IX Co-Investment	Non-Core Portfolio	Developed Americas	11/10/2022	10,000,000	690,373	0	740,217	1.1	7.3
2022	Almanac Realty Securities IX, L.P.	Non-Core Portfolio	Developed Americas	6/13/2022	20,000,000	2,614,340	0	2,408,028	0.9	-9.5
2008	American Value Partners Fund I	Non-Core Portfolio	Developed Americas	10/18/2007	5,000,000	3,785,294	-3,471,997	529,452	1.1	0.9
2008	Ares European Real Estate Fund III, LP	Non-Core Portfolio	Developed Europe	5/6/2008	15,000,000	15,243,750	-16,771,250	55,466	1.1	2.5
2022	Artemis Real Estate Partners Healthcare Fund II	Non-Core Portfolio	Developed Americas	7/15/2022	30,000,000	5,710,777	-1,543,364	3,711,164	0.9	-11.9
2018	Basis Investment Group Fund I	Non-Core Portfolio	Developed Americas	11/16/2017	4,100,000	4,275,751	-2,913,134	2,731,707	1.3	12.0
2004	Blackstone Fund IV	Non-Core Portfolio	Developed Americas	5/10/2004	5,000,000	6,406,782	-9,142,779	44,142	1.4	10.4
2010	Blackstone Real Estate Partners Europe III (USD Vehicle)	Non-Core Portfolio	Developed Europe	10/24/2008	5,000,000	5,327,529	-7,267,791	383,696	1.4	10.0
2014	Blackstone Real Estate Partners Europe IV (USD Vehicle)	Non-Core Portfolio	Unidentified	12/23/2013	26,000,000	25,485,144	-32,398,007	4,201,629	1.4	11.4
2020	Blackstone Real Estate Partners Europe VI (EURO Vehicle)	Non-Core Portfolio	Developed Europe	11/20/2019	19,997,747	14,232,833	-6,163,714	11,199,660	1.2	14.1
2019	Blackstone Real Estate Partners IX	Non-Core Portfolio	Global	9/23/2019	34,000,000	34,925,508	-11,251,894	39,856,023	1.5	27.1
2007	Blackstone Real Estate Partners VI	Non-Core Portfolio	Developed Americas	9/27/2007	10,000,000	11,170,327	-22,123,258	158,814	2.0	13.2
2012	Blackstone Real Estate Partners VII	Non-Core Portfolio	Global	3/31/2012	30,000,000	38,295,846	-59,455,776	5,666,626	1.7	15.6
2015	Blackstone Real Estate Partners VIII	Non-Core Portfolio	Global	8/18/2015	31,500,000	35,895,017	-37,195,935	24,043,757	1.7	16.5
2023	Blackstone Real Estate Partners X	Non-Core Portfolio	Global	3/24/2023	45,000,000	168,523	0	53,745	0.3	0.0
2012	Brookfield Strategic Real Estate Partners	Non-Core Portfolio	Global	9/20/2012	15,000,000	17,630,084	-31,355,174	3,460,688	2.0	18.4
2019	Brookfield Strategic Real Estate Partners III	Non-Core Portfolio	Global	4/12/2019	30,000,000	26,781,305	-6,793,570	28,951,998	1.3	13.4
2022	Brookfield Strategic Real Estate Partners IV	Non-Core Portfolio	Global	8/11/2022	45,000,000	16,376,288	-771,354	17,262,944	1.1	17.3
2022	Carlyle Realty Partners IX	Non-Core Portfolio	Developed Americas	44834	45,000,000	4,397,590	0	3,350,135	0.8	-51.1
2007	Carlyle Realty Partners V	Non-Core Portfolio	Developed Americas	8/27/2007	5,000,000	6,355,442	-9,686,620	10,859	1.5	9.0
2011	Carlyle Realty Partners VI	Non-Core Portfolio	Developed Americas	9/14/2011	20,000,000	19,487,273	-31,459,819	1,730,012	1.7	24.2
2014	Carlyle Realty Partners VII	Non-Core Portfolio	Developed Americas	6/30/2014	15,000,000	13,813,903	-17,768,567	3,672,587	1.6	14.6
2022	CIREP Centre Street II	Non-Core Portfolio	Unidentified	11/22/2022	30,000,000	5,541,872	0	4,867,034	0.9	-19.3
2021	CIREP Centre Street, L.P.	Non-Core Portfolio	Global	7/19/2021	30,000,000	19,705,883	0	23,782,362	1.2	19.2
2014	Divco West Fund IV	Non-Core Portfolio	Developed Americas	1/15/2014	30,000,000	29,700,495	-49,042,015	1,697,788	1.7	24.9
2017	Divco West Fund V	Non-Core Portfolio	Developed Americas	12/21/2016	12,000,000	8,171,514	-2,184,158	7,911,132	1.2	5.2
2020	Divco West Fund VI	Non-Core Portfolio	Developed Americas	11/6/2020	17,000,000	8,610,241	-277,567	8,122,454	1.0	-2.1
2020	DRA Growth & Income Fund X	Non-Core Portfolio	Developed Americas	3/25/2020	13,000,000	11,448,895	-3,199,242	11,130,118	1.3	22.3
2017	DRA Growth and Income Fund IX	Non-Core Portfolio	Developed Americas	3/9/2017	8,000,000	8,172,028	-7,702,422	5,863,311	1.7	17.6
2020	ElmTree Net Lease Fund IV	Non-Core Portfolio	Developed Americas	7/1/2020	14,000,000	8,966,450	-11,924,544	-472,842	1.3	20.9
2016	European Property Investors Special Opportunities IV (EPISO IV)	Non-Core Portfolio	Developed Europe	12/18/2015	10,059,238	9,050,919	-3,666,410	8,849,291	1.4	7.9
2017	Exeter Industrial Value Fund IV	Non-Core Portfolio	Developed Americas	9/20/2017	10,000,000	9,443,137	-19,284,259	1,462,000	2.2	30.4
2021	Exeter Industrial Value Fund V	Non-Core Portfolio	Developed Americas	10/23/2020	10,000,000	9,846,353	0	14,753,472	1.5	31.7
2020	GreenOak Asia III (USD Vehicle)	Non-Core Portfolio	Developed Asia	4/17/2020	14,000,000	14,561,678	-8,421,922	7,517,444	1.1	12.6
2011	H/2 Special Opportunities Fund II	Non-Core Portfolio	Developed Americas	1/31/2011	10,000,000	10,000,001	-14,572,404	167,683	1.5	13.2
2015	H/2 Special Opportunities Fund III	Non-Core Portfolio	Developed Americas	12/29/2014	15,000,000	15,577,770	-15,545,491	3,960,032	1.3	7.2
2017	H/2 Special Opportunities Fund IV	Non-Core Portfolio	Developed Americas	11/15/2016	19,000,000	19,000,000	-4,305,637	18,850,551	1.2	6.1
2017	KKR CMBS B-Piece SMA	Non-Core Portfolio	Developed Americas	9/27/2017	25,000,000	22,313,016	-9,729,295	22,324,810	1.4	9.3
2018	KKR Real Estate Partners Americas II	Non-Core Portfolio	Developed Americas	2/9/2018	20,070,000	21,244,835	-27,163,671	6,816,673	1.6	27.6
2021	KKR Real Estate Partners Americas III	Non-Core Portfolio	Developed Americas	11/23/2021	42,000,000	24,995,064	-1,896,557	23,262,358	1.0	0.6
2021	KKR Real Estate Partners Europe II	Non-Core Portfolio	Developed Europe	9/1/2021	17,650,000	12,691,756	-4,007,355	9,971,815	1.1	9.1
2021	KKR Real Estate Securities Dislocation Opportunity Co-Investment Fund	Non-Core Portfolio	Developed Americas	10/9/2020	21,000,000	11,537,987	-13,110,905	1,808,017	1.3	35.4
2021	LaSalle GPS Co-Investment Program - Non-Core	Non-Core Portfolio	Developed Americas	9/28/2021	25,800,000	9,675,257	-317,346	9,730,959	1.0	3.6
2022	LBA Logistics Value Fund IX	Non-Core Portfolio	Developed Americas	2/22/2022	25,000,000	6,730,769	0	6,074,181	0.9	-12.7
2014	Lone Star Real Estate Fund III	Non-Core Portfolio	Global	5/20/2014	25,000,000	23,435,387	-31,708,871	106,309	1.4	14.1
2017	Lone Star Real Estate Fund V	Non-Core Portfolio	Global	9/26/2017	23,100,000	7,492,053	-3,836,178	2,649,529	0.9	-6.6
2007	Metropolitan Workforce Housing Fund	Non-Core Portfolio	Developed Americas	7/13/2007	3,500,000	3,503,257	-4,186,143	62,696	1.2	3.8
2013	NYC Asset Investor #1 LLC	Non-Core Portfolio	Developed Americas	6/25/2013	5,000,000	5,600,357	-2,857,322	3,105,474	1.1	1.1
2013	NYC Asset Investor #3 LLC	Non-Core Portfolio	Developed Americas	9/20/2013	6,000,000	4,375,683	-1,207,701	3,971,494	1.2	3.1
2021	PGIM Real Estate Capital VII (USD Feeder) SCSp	Non-Core Portfolio	Developed Europe	1/28/2021	18,000,000	4,049,679	932,418	5,759,705	1.7	13.5
2017	Pramerica Real Estate Capital VI (PRECap VI)	Non-Core Portfolio	Developed Europe	4/21/2017	10,040,161	10,809,801	-8,852,437	3,793,616	1.2	8.3
2016	PW Real Estate Fund III LP	Non-Core Portfolio	Developed Europe	10/7/2016	9,562,261	7,888,490	-19,446,852	3,726,025	2.9	30.7
2021	Rialto Real Estate Fund IV	Non-Core Portfolio	Developed Americas	1/14/2021	25,000,000	20,117,208	-2,270,550	18,981,395	1.1	5.4
2008	Silverpeak Legacy Partners III	Non-Core Portfolio	Global	5/28/2008	5,000,000	2,216,844	-469,649	109,880	0.3	-13.1
2008	Stockbridge Real Estate Fund III	Non-Core Portfolio	Developed Americas	9/9/2008	13,500,000	13,499,074	-8,414,877	8,125,760	1.2	2.3
2012	Taconic New York City Investment Fund LP	Non-Core Portfolio	Developed Americas	7/5/2012	20,000,000	8,363,637	-13,682,720	1,487,010	1.8	15.5
2009	Thor Urban Property Fund II	Non-Core Portfolio	Developed Americas	10/30/2008	5,000,000	6,849,514	-6,959,072	547,361	1.1	2.8
2022	TPG Real Estate Partners IV	Non-Core Portfolio	Global	12/21/2022	41,000,000	2,594,492	0	1,870,147	0.7	-28.2
2009	Walton Street Real Estate Fund VI	Non-Core Portfolio	Global	4/27/2009	5,000,000	4,432,393	-5,072,700	2,178,523	1.6	8.4
2010	Westbrook Real Estate Fund VIII	Non-Core Portfolio	Global	12/28/2009	5,000,000	5,985,544	-6,889,968	666,367	1.3	9.3
2016	Westbrook Real Estate Fund X	Non-Core Portfolio	Global	7/18/2016	8,000,000	7,776,175	-6,823,862	2,736,699	1.2	9.3
2021	Westbrook Real Estate Fund XI	Non-Core Portfolio	Global	1/28/2021	10,000,000	5,269,848	-2,628,343	3,649,244	1.2	21.7
	Non-Core Portfolio				**1,147,151,034**	**771,511,219**	**-649,461,576**	**422,092,157**	**1.3**	**9.5**
	Small Emerging Manager				**25,820,000**	**26,498,393**	**-31,347,157**	**6,872,147**	**1.4**	**8.5**
	New York City Fire Department Pension Fund				**1,769,379,267**	**1,383,105,153**	**-893,382,593**	**1,149,432,550**	**1.5**	**9.0**

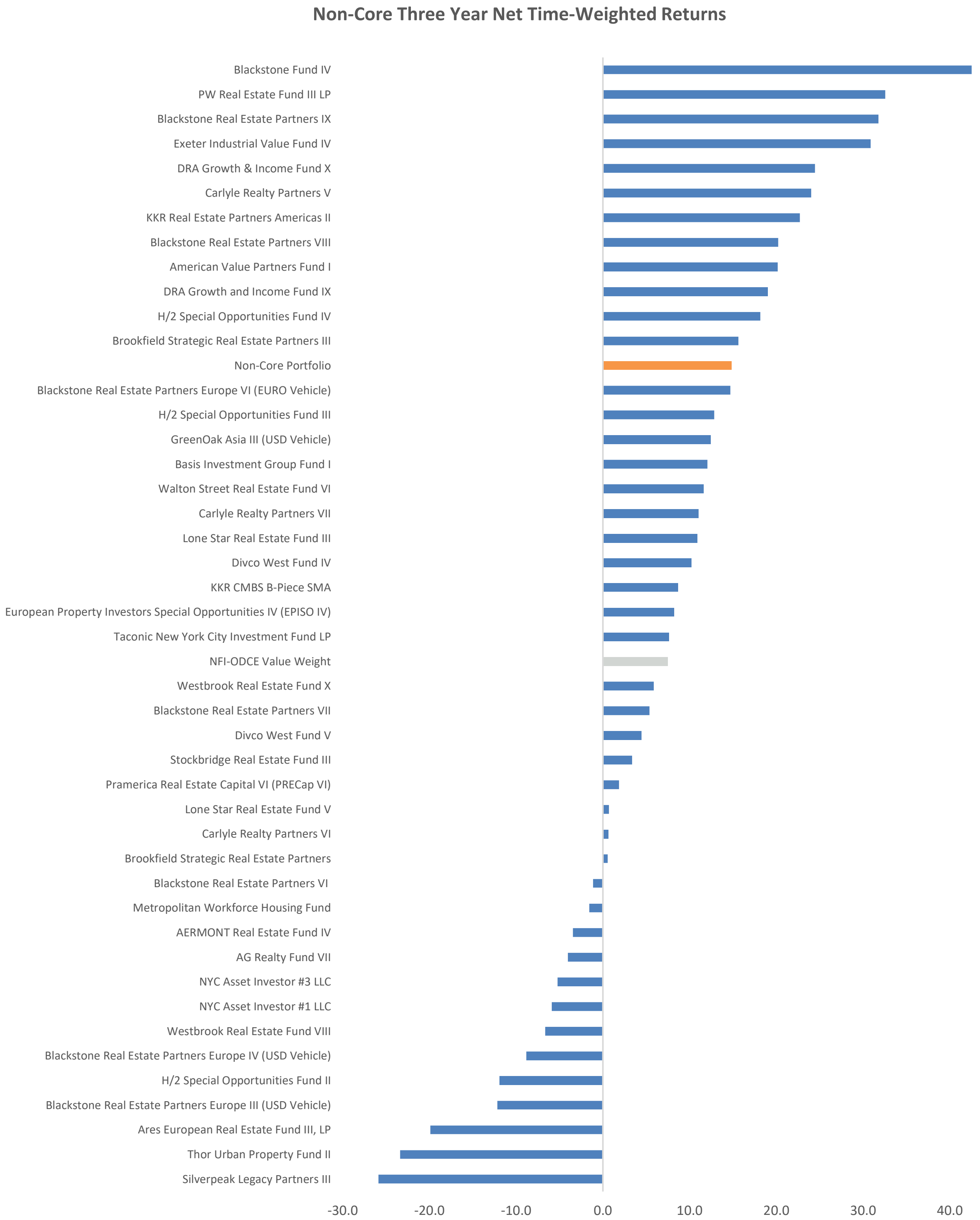
Source: PCG historical cash flow data. TTG cash flow data from Fund Managers, effective 2005. Note: The equity multiples and IRRs contained in this report are interim calculations based upon information provided by the investment managers of the New York City Retirement Systems, including cash flows and quarterly unaudited, or audited, valuations. The IRR calculated in early years of a fund life is not meaningful given the J-curve effect and can be significantly impacted by the timing of cash flows, investment strategy, investment pacing, and fund life. The calculations are not necessarily indicative of total fund performance, which can only be determined after the fund is liquidated and all capital contributed and earnings have been distributed to the investor. All data supplied is as of March 31, 2023. Note: The General Partner of the JPMorgan Urban Renaissance Fund terminated the Fund on February 23, 2010 and all capital contributed, including management fees, was returned to investors.

Core / Core Plus Three Year Net Time-Weighted Returns



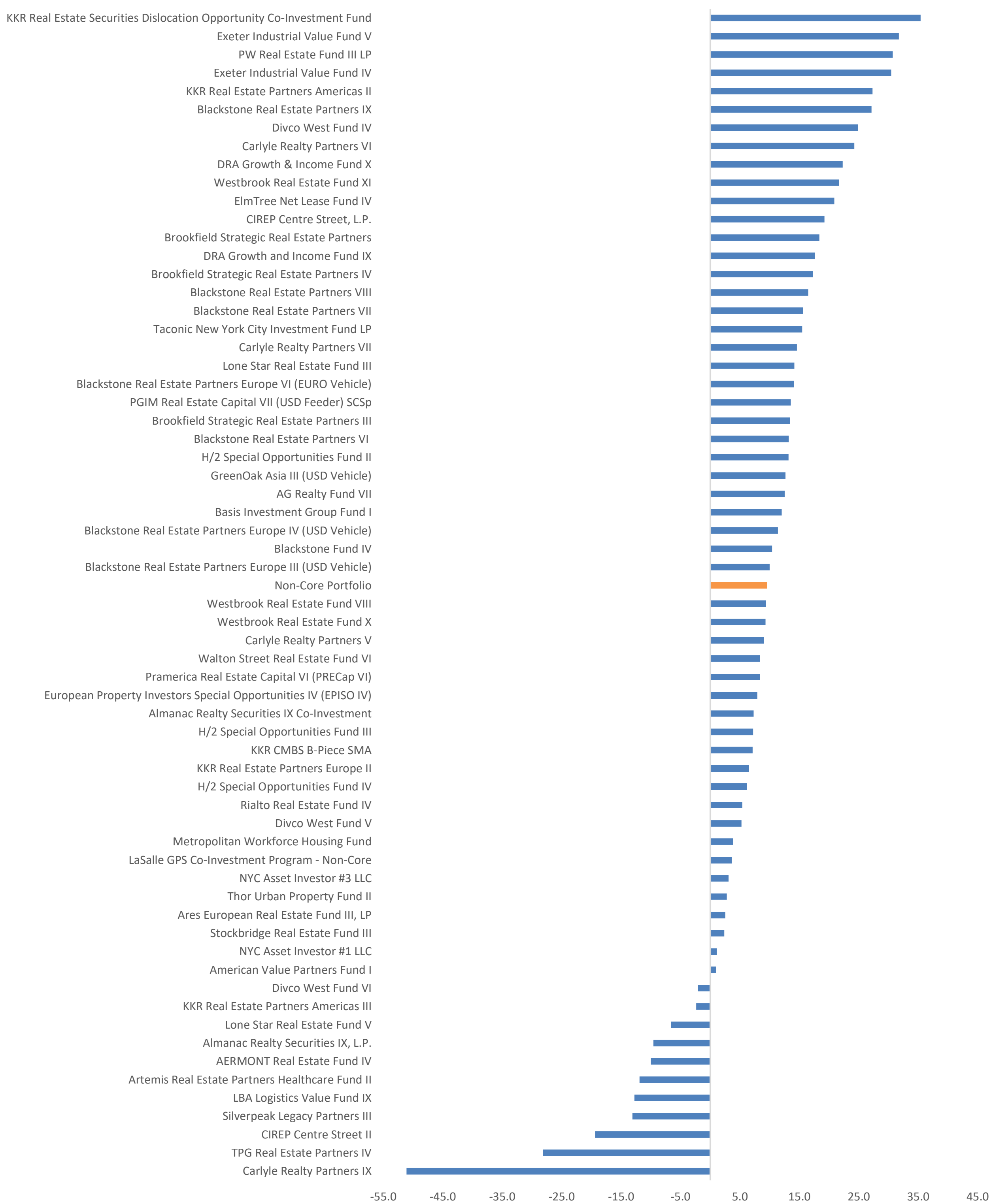
Core / Core Plus One Year Net Time-Weighted Returns





Non-Core Three Year Net Time-Weighted Returns
Blackstone Fund IV
PW Real Estate Fund III LP
Blackstone Real Estate Partners IX
Exeter Industrial Value Fund IV
DRA Growth & Income Fund X
Carlyle Realty Partners V
KKR Real Estate Partners Americas II
Blackstone Real Estate Partners VIII
American Value Partners Fund I
DRA Growth and Income Fund IX
H/2 Special Opportunities Fund IV
Brookfield Strategic Real Estate Partners III
Non-Core Portfolio
Blackstone Real Estate Partners Europe VI (EURO Vehicle)
H/2 Special Opportunities Fund III
GreenOak Asia III (USD Vehicle)
Basis Investment Group Fund I
Walton Street Real Estate Fund VI
Carlyle Realty Partners VII
Lone Star Real Estate Fund III
Divco West Fund IV
KKR CMBS B-Piece SMA
European Property Investors Special Opportunities IV (EPISO IV)
Taconic New York City Investment Fund LP
NFI-ODCE Value Weight
Westbrook Real Estate Fund X
Blackstone Real Estate Partners VII
Divco West Fund V
Stockbridge Real Estate Fund III
Pramerica Real Estate Capital VI (PRECap VI)
Lone Star Real Estate Fund V
Carlyle Realty Partners VI
Brookfield Strategic Real Estate Partners
Blackstone Real Estate Partners VI
Metropolitan Workforce Housing Fund
AERMONT Real Estate Fund IV
AG Realty Fund VII
NYC Asset Investor #3 LLC
NYC Asset Investor #1 LLC
Westbrook Real Estate Fund VIII
Blackstone Real Estate Partners Europe IV (USD Vehicle)
H/2 Special Opportunities Fund II
Blackstone Real Estate Partners Europe III (USD Vehicle)
Ares European Real Estate Fund III, LP
Thor Urban Property Fund II
Silverpeak Legacy Partners III
-30.0
-20.0
-10.0
0.0
10.0
20.0
30.0
40.0

Non-Core Since Inception Net IRRs



Infrastructure Quarterly Report (Public):

QUARTERLY MONITORING REPORT

For the period ended March 31, 2023

Report Prepared For:

New York City Fire Department Pension Fund - Infrastructure

IMPORTANT INFORMATION

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On September 20, 2021, StepStone Group Inc. acquired Greenspring Associates, Inc. (“Greenspring”). Upon the completion of this acquisition, the management agreement of each Greenspring vehicle was assigned to StepStone Group LP.

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All data is as of March 31, 2023 unless otherwise noted.

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS. ACTUAL PERFORMANCE MAY VARY.

PERFORMANCE SUMMARY

The New York City Fire Department Pension Fund ("NYCFDPF") established the Infrastructure Program (the "Program") in December of 2012 on behalf of its beneficiaries to participate in attractive long-term investment opportunities and to provide diversification to its overall pension investment portfolio.

The inclusion of infrastructure in the NYCFDPF pension portfolio allows for global investments in facilities or assets that provide core essential services critical to the operation and development of economies. Typically infrastructure investments have high barriers to entry due to significant capital expenditure requirements, exclusive long term contracts or regulatory requirements. Infrastructure investments are comprised of long useful-life assets with high tangible value and relatively low value erosion over time.

The Program seeks to invest in opportunities in a variety of infrastructure sectors, including but not limited to, transportation, energy, power, utilities, water, wastewater, communications and social infrastructure.

StepStone Group LP ("StepStone") was engaged by NYCFDPF on October 20, 2014 to provide infrastructure advisory services for prospective investment opportunities and monitoring and reporting services for existing and new investments.

Since inception through March 31, 2023 , the Program has committed US$668.8 million to 40 partnership investments (the "Portfolio"). This quarterly monitoring report covers the performance of the Portfolio as of March 31, 2023 as well as significant activity that occurred during Q1 2023.

ALLOCATION SUMMARY

NYCFDPF has an Infrastructure allocation target of 3% of total pension assets. As of March 31, 2023, the market value of NYCFDPF Infrastructure Program represented approximately 1.9% of total pension assets , a 17 bps change from the prior quarter.

As of March 31, 2023. In USD millions.

	INCEPTION TO MARCH 31, 2023	INCEPTION TO DECEMBER 31, 2022	INCEPTION TO MARCH 31, 2022	QUARTERLY Δ	ANNUAL Δ
Total Pension Assets	$19,139.0	$18,980.0	$15,987.0	$159.0	$3,152.0
Total Infrastructure Assets	$358.9	$323.2	$275.2	$35.7	$83.7
% Allocation to Infrastructure	1.9%	1.7%	1.7%	17 bps	15 bps

Past performance is not necessarily indicative of future results and there can be no assurance that the investment will achieve comparable results or avoid substantial losses.

PERFORMANCE SUMMARY CONTINUED

As of March 31, 2023, the Infrastructure Program has achieved a Total Value to Paid-In multiple of 1.3x invested capital and an IRR of 12.3%.

As of March 31, 2023. In USD millions.

	INCEPTION TO MARCH 31, 2023	INCEPTION TO DECEMBER 31, 2022	INCEPTION TO MARCH 31, 2022	QUARTERLY Δ	ANNUAL Δ
Number of Managers	14	14	12	0	2
Number of Investments	40	38	33	2	7
Number of Active Investments	40	38	33	2	7
Committed Capital	$668.8	$614.2	$508.8	$54.6	$160.0
Unfunded Commitment	326.9	302.1	264.2	24.7	62.7
Total Exposure	685.8	625.3	539.4	60.4	146.4
Total Contributed	373.1	342.4	267.6	30.6	105.5
Total Distributed	134.0	129.2	87.0	4.8	47.0
Total Market Value	358.9	323.2	275.2	35.7	83.7
Since Inception G/L	119.8	110.0	94.6	9.8	25.2
Total Value	$492.9	$452.4	$362.2	$40.5	$130.7
Net DPI	0.4x	0.4x	0.3x		
Net TVM	1.3x	1.3x	1.4x		
Net IRR	12.3%	12.3%	13.4%	0 bps	(113 bps)

Past performance is not necessarily indicative of future results and there can be no assurance that the investment will achieve comparable results or avoid substantial losses.

IRR and TVM for certain vehicles may have been impacted by StepStone's or the underlying GP's use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

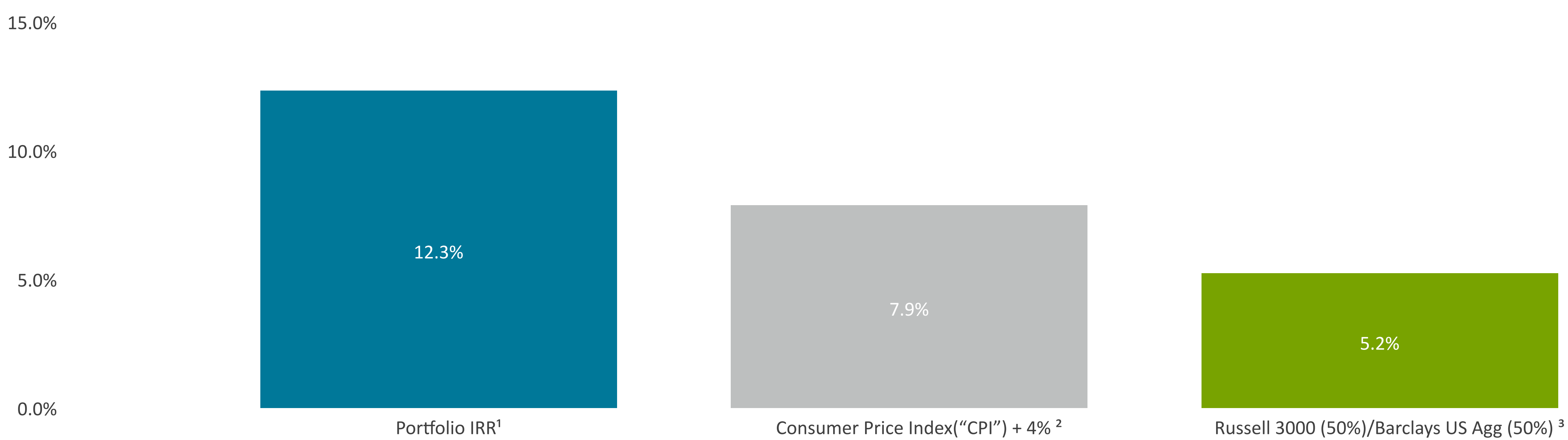
Unless otherwise indicated, all underlying investment attribution and performance information presented is net of fees and expenses charged by the underlying investment, but gross of StepStone vehicle/account fees and expenses.

Where indicated, net return figures presented for StepStone vehicle/account performance include fees and expenses paid to StepStone.

"Market Value" may not tie to financial statements due to timing variances related to underlying manager capital activity.

PORTFOLIO PERFORMANCE VS. BENCHMARK

The following graph illustrates Portfolio IRR performance versus benchmarks as of March 31, 2023.



1. NYCFDPF since inception Internal Rate of Return ("IRR") is calculated based on the Portfolio's daily cash flows and market value as of quarter-end. IRR is net of fund managers' fees, expenses and carried interest. Past performance is not necessarily indicative of future results.
2. Consumer Price Index ("CPI") benchmark represents the compound annual growth rate of the Consumer Price Index for All Urban Consumers and All Items, as provided by the U.S. Department of Labor: Bureau of Labor Statistics, calculated over a five-year rolling period plus a 4.0% premium.
3. Benchmark is a dollar-weighted PME+ calculation of daily changes in 50% of the Russell 3000® Index and 50% of the Barclays U.S. Aggregate® Index. These index comparisons are being provided solely for informational purposes as an indication of returns that could be earned by investors by making similar investments in the indexes and should not be relied upon for any purpose. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

STEPSTONE inside private markets

PORTFOLIO DIVERSIFICATION

The Program's objective is to build a Portfolio that is diversified by investment strategy, asset type, and geography. The target investment strategy ranges are as follows:

- Core Infrastructure Investments: 60% to 100%; and
- Non-Core Infrastructure Investments: 0% to 40%.

Actual percentages may differ substantially from these targets during the initial years of the Program. The following table illustrates the current diversification of the Portfolio by fund strategy, geography and industry focus.

As of March 31, 2023. In USD millions.

STRATEGY	MARKET VALUE	MARKET VALUE % OF TOTAL	UNFUNDED	UNFUNDED % OF TOTAL	EXPOSURE	EXPOSURE % OF TOTAL
Core	$289.7	80.7%	$276.2	84.5%	$565.9	82.5%
Non-Core	$69.2	19.3%	$50.7	15.5%	$119.9	17.5%
Total	**$358.9**	**100.0%**	**$326.9**	**100.0%**	**$685.8**	**100.0%**

GEO FOCUS	MARKET VALUE	MARKET VALUE % OF TOTAL	UNFUNDED	UNFUNDED % OF TOTAL	EXPOSURE	EXPOSURE % OF TOTAL
Global	$95.8	26.7%	$193.5	59.2%	$289.2	42.2%
OECD	$187.6	52.3%	$75.5	23.1%	$263.1	38.4%
North America	$75.5	21.0%	$57.9	17.7%	$133.4	19.5%
Total	**$358.9**	**100.0%**	**$326.9**	**100.0%**	**$685.8**	**100.0%**

INDUSTRY	MARKET VALUE	MARKET VALUE % OF TOTAL	UNFUNDED	UNFUNDED % OF TOTAL	EXPOSURE	EXPOSURE % OF TOTAL
Diversified	$266.4	74.2%	$267.8	81.9%	$534.2	77.9%
Energy	$45.8	12.8%	$25.3	7.7%	$71.1	10.4%
Commodities Logistics	$15.9	4.4%	$31.9	9.8%	$47.9	7.0%
Communication	$25.3	7.1%	$1.5	0.5%	$26.8	3.9%
Transportation	$2.9	0.8%	$0.0	0.0%	$2.9	0.4%
Renewables	$2.6	0.7%	$0.3	0.1%	$2.9	0.4%
Total	**$358.9**	**100.0%**	**$326.9**	**100.0%**	**$685.8**	**100.0%**

PORTFOLIO REVIEW

QUARTERLY HIGHLIGHTS

• New Investment Commitments – During the first quarter of 2023, the Program closed on 2 new investment commitments totaling $54.0 million.

As of March 31, 2023. In USD millions.

INVESTMENT	CLOSING DATE	VINTAGE YEAR	STRATEGY	GEO FOCUS	INDUSTRY FOCUS	COMMITTED CAPITAL
EQT Infrastructure VI (No.2) USD SCSp	Mar-2023	2023	Infrastructure	Global	Diversified	$27.0
Global Infrastructure Partners V-A/B, L.P.	Mar-2023	2023	Infrastructure	OECD	Diversified	$27.0
Total						**$54.0**

• Subsequent to quarter-end, the Program closed on 2 new investment commitments.

In USD millions.

INVESTMENT	CLOSING DATE	VINTAGE YEAR	STRATEGY	GEO FOCUS	INDUSTRY FOCUS	COMMITTED CAPITAL
Ardian Infrastructure Fund VI	Jun-2023	2023	Infrastructure	OECD	Diversified	$29.6
Elite Co-Invest AIV, L.P.	Jul-2023	2023	Infrastructure	Europe	Renewables	$3.7
Total						**$33.3**

PORTFOLIO REVIEW CONTINUED

• New Underlying Fund Investments – During the first quarter of 2023, 16 investment positions were added to the Portfolio. Below is a list of the top ten based on invested capital.

As of March 31, 2023. In USD millions.

COMPANY	INVESTMENT DATE	STAGE	INDUSTRY	COUNTRY	EXPOSED INVESTED CAPITAL	EXPOSED MARKET VALUE
European Telecom Towers (DFMG)	Feb-2023	Private	Telecom	Germany	$3.3	$3.4
PSO	Mar-2023	Private	Telecom	Poland	$2.9	$3.0
Intrado	Jan-2023	Private	Telecom	United States	$2.7	$2.7
Environmental 360 Solutions Ltd.	Jan-2023	Private	Sustainability	Canada	$1.4	$1.4
Lines of Credit - Pooled Contribution	Feb-2023	Private	Other	United States	$0.9	$0.9
Greenvolt - Energias Renováveis, S.A.	Feb-2023	Public	Sustainability	Portugal	$0.4	$0.4
Grand Valley Wind	Feb-2023	Private	Sustainability	Canada	$0.4	$0.4
Seraya Partners Fund I, L.P.	Feb-2023	Private	Other	Singapore	$0.4	$0.3
Pinnacle Power Limited	Mar-2023	Private	Utilities	United Kingdom	$0.3	$0.3
Ancala Infrastructure Fund III SCSp	Feb-2023	Private	Other	United Kingdom	$0.3	$0.3

• Company Exits – During the first quarter of 2023, 1 investment position exited the Portfolio.

As of March 31, 2023. In USD millions.

COMPANY	INVESTMENT DATE	EXIT DATE	STAGE	INDUSTRY	COUNTRY	INVESTED CAPITAL	TOTAL VALUE
SNC-Lavalin Compression Services, LLC	Jul-2018	Feb-2023	Private	Midstream	United States	$0.6	$0.8

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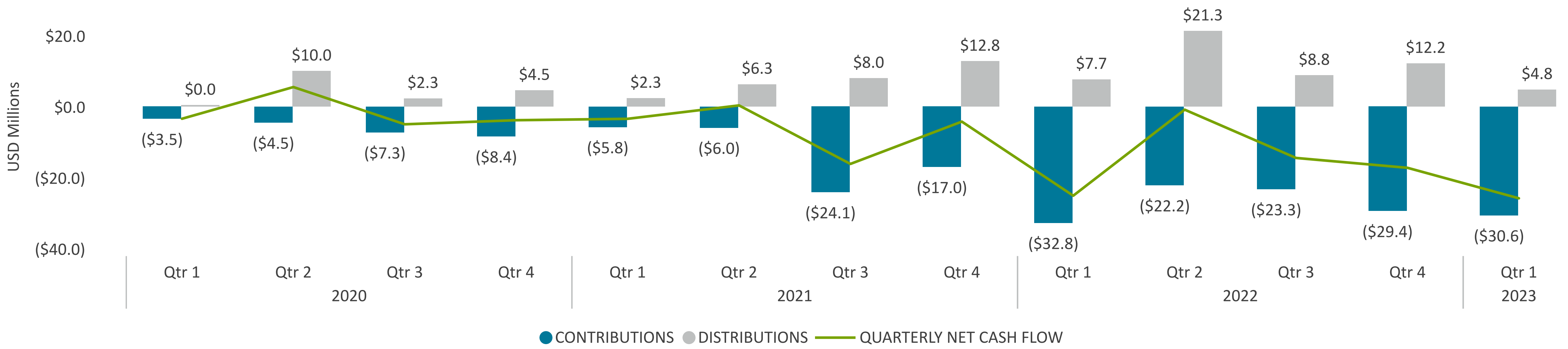
QUARTERLY CASH FLOW ACTIVITY

During the first quarter of 2023, the portfolio contributed $30.6 million and received $4.8 million of distributions, for a net cash outflow of $25.9 million.



QUARTERLY TOP CONTRIBUTIONS AND DISTRIBUTIONS

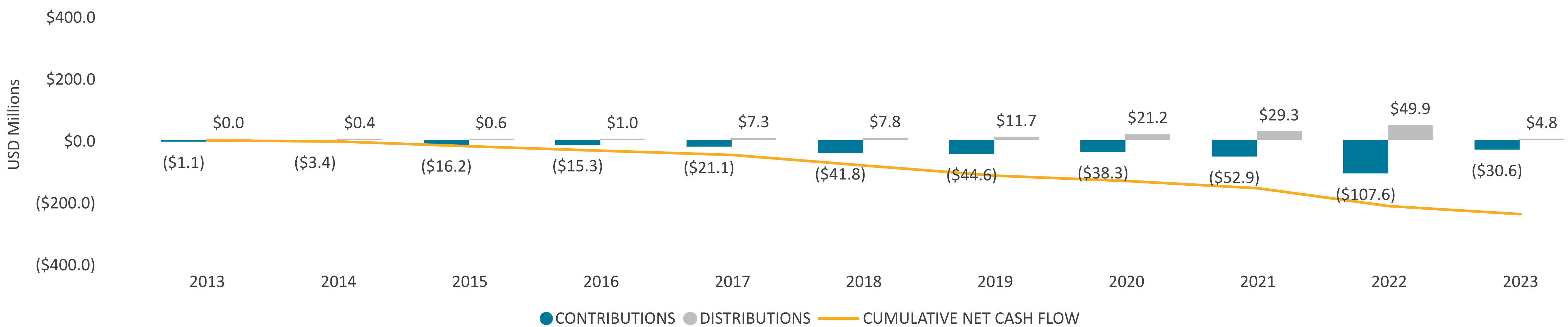
As of March 31, 2023. In USD millions.

INVESTMENT	CONTRIBUTIONS	% OF TOTAL
Axium Infrastructure North America (2021)	$8.1	26.6%
EQT Infrastructure V (No.2) USD SCSp	$6.0	19.6%
InfraVia European Fund V SCSp	$3.8	12.2%
Stonepeak Infrastructure Fund IV, L.P.	$3.0	9.9%
Brookfield Infrastructure Fund IV, L.P.	$2.5	8.3%
Top 5 Contributions	**$23.5**	**76.6%**

INVESTMENT	DISTRIBUTIONS	% OF TOTAL
KKR Global Infrastructure Investors II L.P.	$0.8	17.0%
ASF VII Infrastructure L.P.	$0.7	14.1%
NYCRS EIG Energy Partners, L.P.	$0.5	10.2%
Axium Infrastructure North America (2021)	$0.4	9.1%
Brookfield Infrastructure Fund IV, L.P.	$0.4	7.8%
Top 5 Distributions	**$2.8**	**58.3%**

SINCE INCEPTION ANNUAL CASH FLOW ACTIVITY

During the three months ended March 31, 2023, the portfolio contributed $30.6 million and received $4.8 million of distributions, for a net cash outflow of $25.9 million.



YEAR-TO-DATE TOP CONTRIBUTIONS AND DISTRIBUTIONS

As of March 31, 2023. In USD millions.

INVESTMENT	CONTRIBUTIONS	% OF TOTAL
Axium Infrastructure North America (2021)	$8.1	26.6%
EQT Infrastructure V (No.2) USD SCSp	$6.0	19.6%
InfraVia European Fund V SCSp	$3.8	12.2%
Stonepeak Infrastructure Fund IV, L.P.	$3.0	9.9%
Brookfield Infrastructure Fund IV, L.P.	$2.5	8.3%
Top 5 Contributions	**$23.5**	**76.6%**

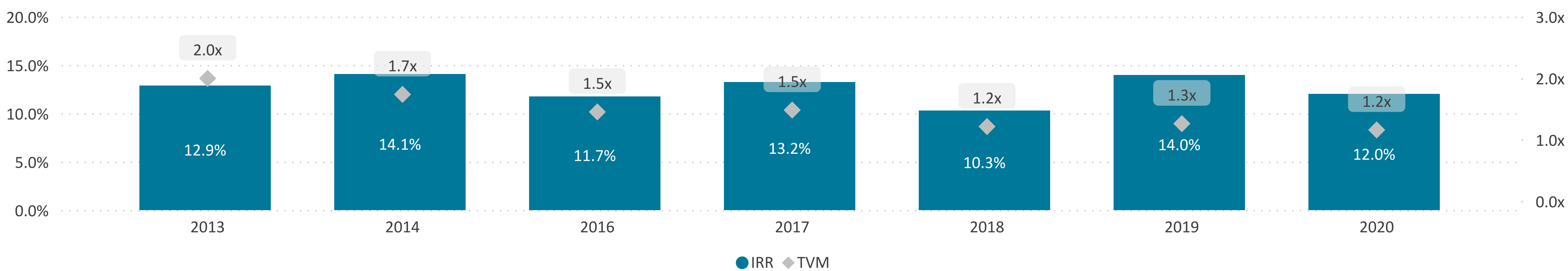
INVESTMENT	DISTRIBUTIONS	% OF TOTAL
KKR Global Infrastructure Investors II L.P.	$0.8	17.0%
ASF VII Infrastructure L.P.	$0.7	14.1%
NYCRS EIG Energy Partners, L.P.	$0.5	10.2%
Axium Infrastructure North America (2021)	$0.4	9.1%
Brookfield Infrastructure Fund IV, L.P.	$0.4	7.8%
Top 5 Distributions	**$2.8**	**58.3%**

PERFORMANCE BY VINTAGE YEAR

The following table illustrates the Portfolio's since-inception investment performance by vintage year as of March 31, 2023.

As of March 31, 2023. In USD millions.

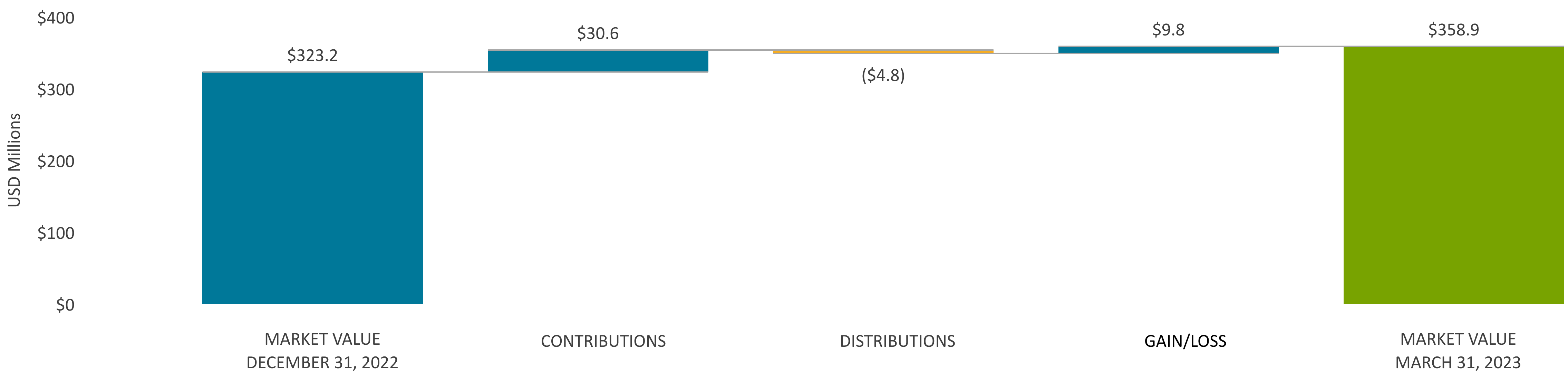
VINTAGE YEAR	COMMIT	CONT	DIST	NAV	TOTAL VALUE	UNFUNDED	TOTAL EXPOSURE	TOTAL EXPOSURE % OF TOTAL	NET DPI	NET TVM	NET IRR
2013	$15.0	$13.5	$14.0	$12.8	$26.9	$2.7	$15.5	2%	1.0x	2.0x	12.9%
2014	$32.0	$37.2	$35.4	$29.1	$64.6	$0.8	$30.0	4%	1.0x	1.7x	14.1%
2016	$68.9	$61.9	$36.2	$53.6	$89.8	$17.5	$71.1	10%	0.6x	1.5x	11.7%
2017	$41.8	$38.2	$27.8	$28.7	$56.5	$7.4	$36.1	5%	0.7x	1.5x	13.2%
2018	$64.0	$54.5	$7.9	$58.2	$66.1	$13.8	$72.0	10%	0.1x	1.2x	10.3%
2019	$55.3	$47.5	$7.8	$52.1	$59.9	$10.1	$62.2	9%	0.2x	1.3x	14.0%
2020	$63.5	$40.2	$3.0	$43.5	$46.6	$25.8	$69.4	10%	0.1x	1.2x	12.0%
2021	$134.9	$66.0	$1.7	$67.2	$68.9	$69.5	$136.7	20%	NM	NM	NM
2022	$139.4	$14.1	$0.1	$13.5	$13.6	$125.3	$138.8	20%	NM	NM	NM
2023	$54.0	$0.0	$0.0	$0.0	$0.0	$54.0	$54.0	8%	NM	NM	NM
Total	**$668.8**	**$373.1**	**$134.0**	**$358.9**	**$492.9**	**$326.9**	**$685.8**	**100%**	**0.4x**	**1.3x**	**12.3%**



* Performance of funds with less than two years of activity is not considered meaningful.

QUARTERLY VALUATION MOVEMENT

During the first quarter of 2023, the value of NYCFDPF - Infrastructure's portfolio increased by $9.8 million, or 3.0%.



QUARTERLY TOP INVESTMENT GAINS AND LOSSES

As of March 31, 2023. In USD millions.

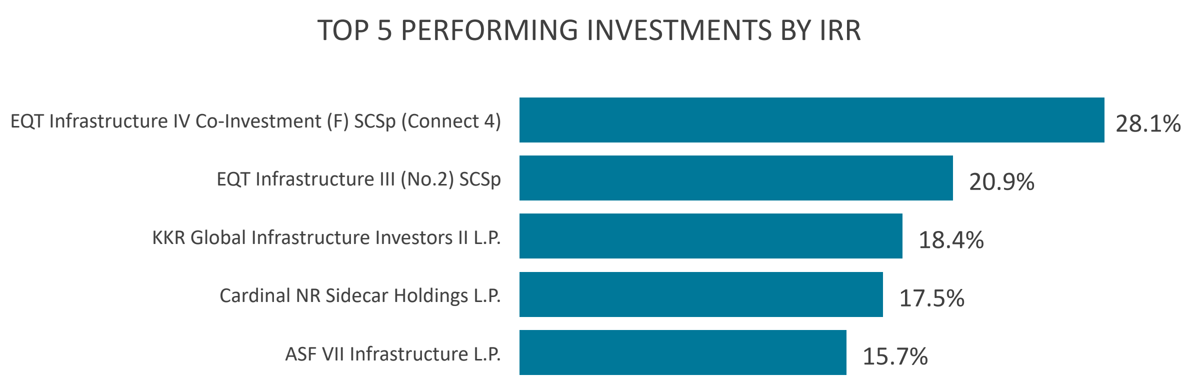
INVESTMENT	$	%
EQT Infrastructure V (No.2) USD SCSp	$1.4	6.8%
KKR Global Infrastructure Investors III L.P.	$1.0	8.0%
EQT Infrastructure IV (No.2) USD SCSp	$0.7	3.7%
IFM Global Infrastructure Fund	$0.7	3.7%
KKR Global Infrastructure Investors II L.P.	$0.6	10.7%
Top 5 Gains	**$4.5**	**5.8%**

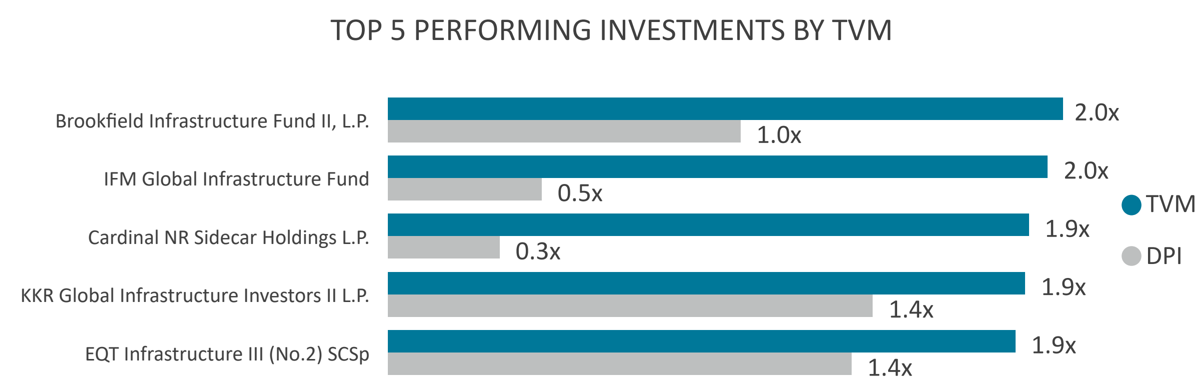
INVESTMENT	$	%
DIF Infrastructure VII SCSp	($0.4)	
Brookfield Infrastructure Fund V, LP	($0.3)	(323.3%)
Global Energy & Power Infrastructure Fund II	($0.1)	(4.0%)
Blackrock Global Infrastructure Fund IV	($0.1)	(8.8%)
BIS NYC Infrastructure Emerging Manager Opportunities Fund, L.P.	($0.1)	(3.5%)
Bottom 5 Losses	**($1.0)**	**(12.7%)**

SINCE INCEPTION VALUATION MOVEMENT

Through March 31, 2023, NYCFDPF - Infrastructure's portfolio has generated a gain of $119.8 million.

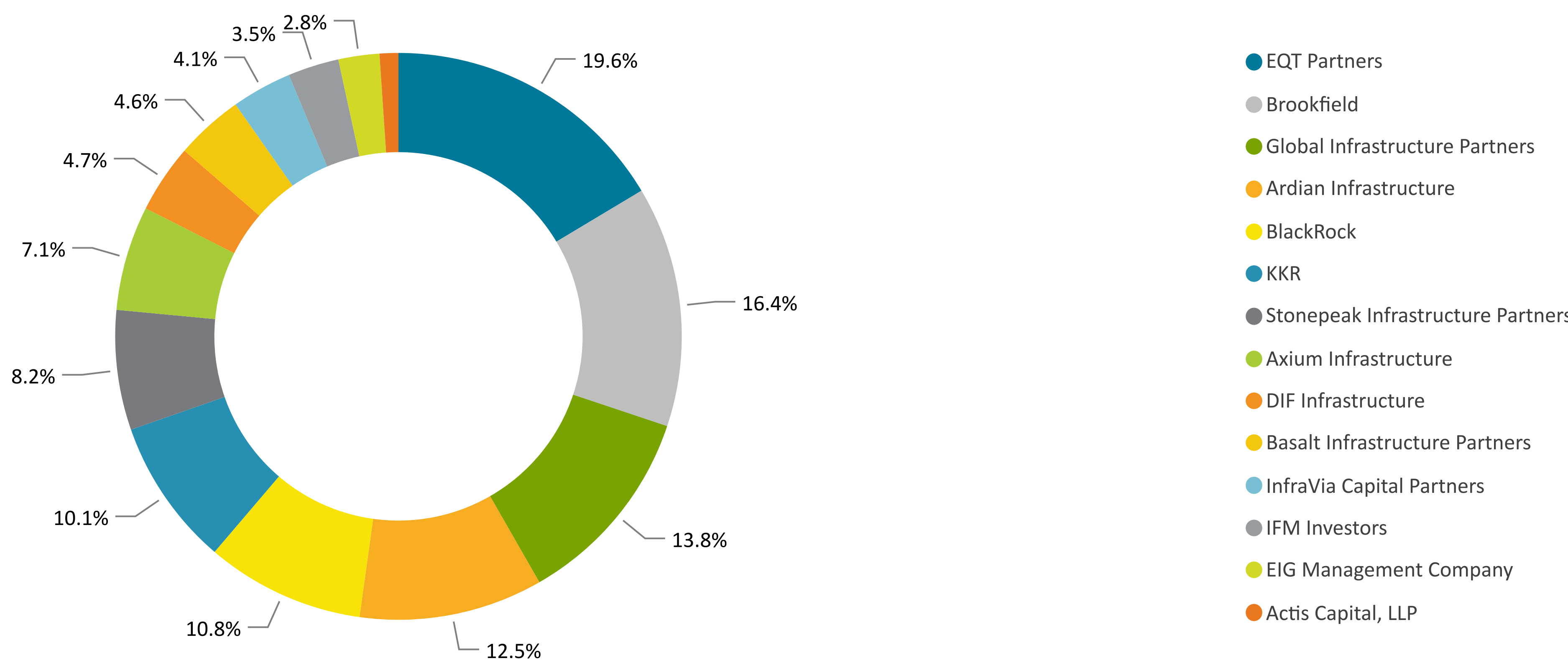
SINCE INCEPTION TOP PERFORMING INVESTMENTS





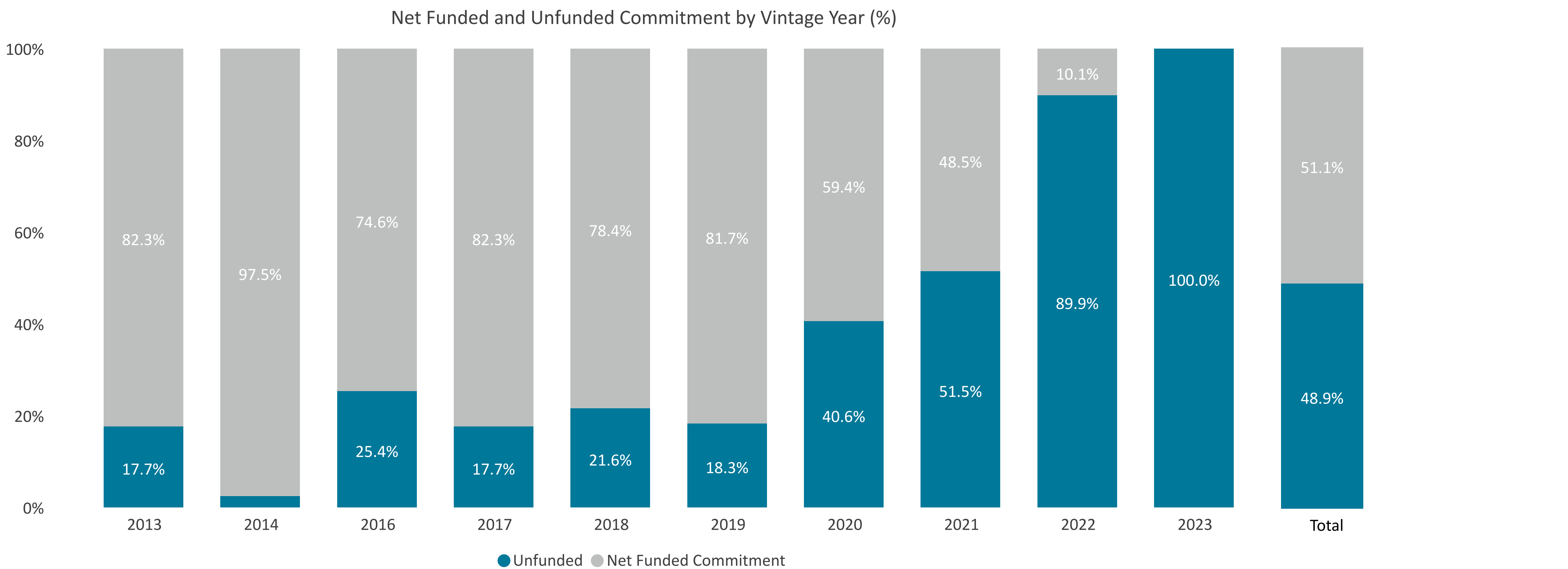
MANAGER DIVERSIFICATION

As of March 31, 2023, the Program had made 14 investment commitments to 40 managers. NYCFDPF seeks to limit its exposure to any single manager to no more than 20% of the total Infrastructure Program when fully invested. As the Program matures and closes on additional commitments, the single manager exposure is expected to decline significantly. Below is the Portfolio's current exposure by manager.



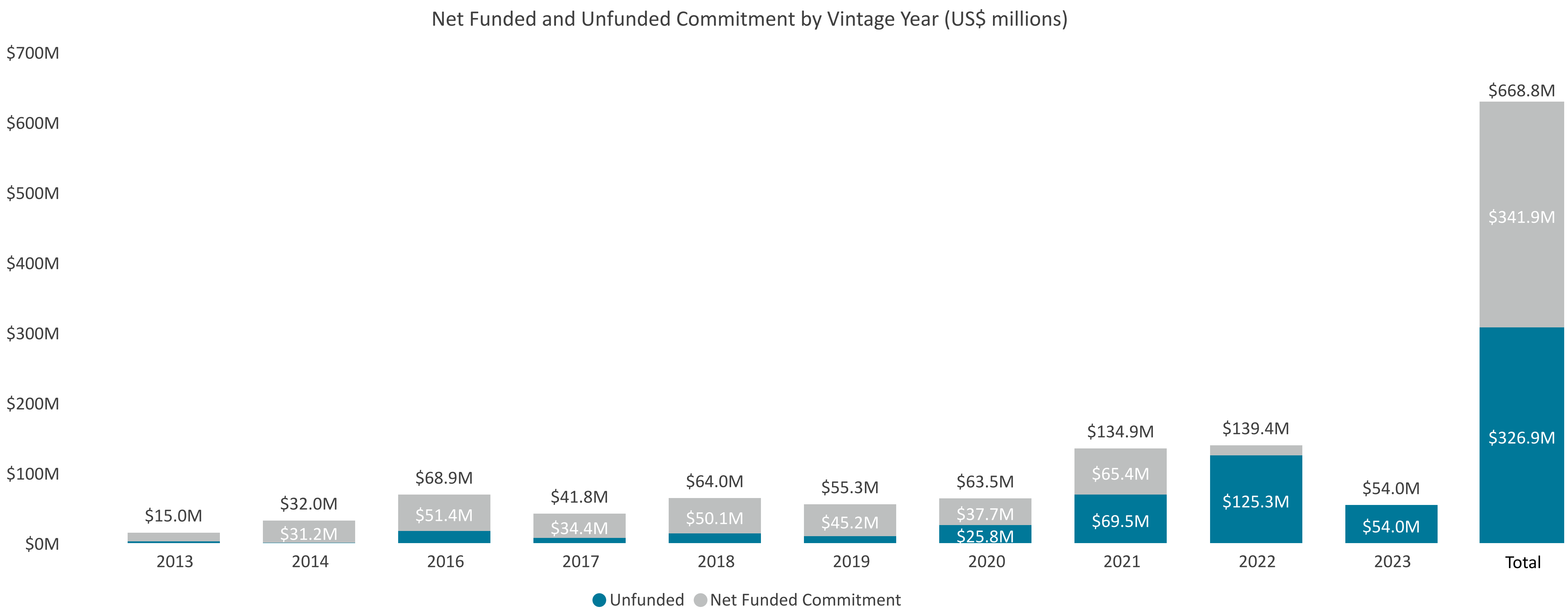
NET UNFUNDED AND UNFUNDED COMMITMENT BY VINTAGE YEAR

The following chart illustrates the Portfolio's net funded commitments (defined as total contributions inside commitment less any returns of excess capital and recallable distributions) as a percentage of total capital commitments, by fund vintage year, as of March 31, 2023. Overall, the Portfolio was 48.9% unfunded as of quarter-end.



NET UNFUNDED AND UNFUNDED COMMITMENT BY VINTAGE YEAR CONTINUED

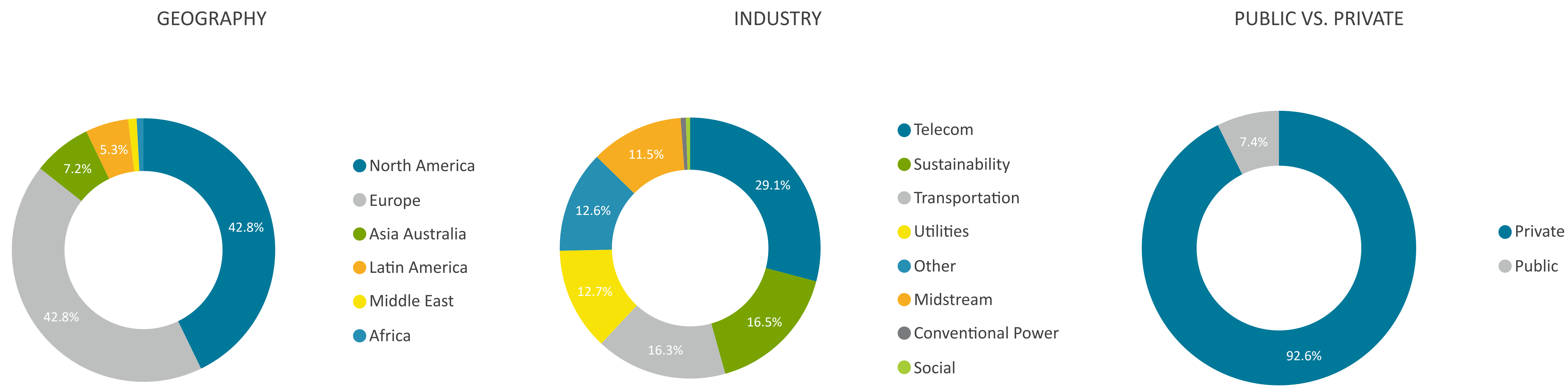
The following chart illustrates the Portfolio's net funded commitments relative to total capital commitments, by fund vintage year, as of March 31, 2023. Overall, the Portfolio had US$326.9 million of unfunded commitments as of quarter-end.



PORTFOLIO COMPANY LEVEL ANALYSIS

As of quarter-end, the Portfolio had exposure to 347 unrealized portfolio companies/investment positions. As the Portfolio matures, the number of portfolio companies/investment positions is expected to increase significantly. On the individual fund level, all current investments are within the single investment limitation of 15% of total fund size. The Program's individual portfolio investment exposure is relatively concentrated as a result of the relative immaturity of the Program.

The following chart illustrates the portfolio's diversification by geography, industry, and publicly-traded vs. privately-held assets based on Market Value at the portfolio company level as of March 31, 2023.



SCHEDULE OF INVESTMENTS

As of March 31, 2023. In USD millions.

INVESTMENT	CLOSING DATE	VINTAGE YEAR	GEO FOCUS	COMMIT	CONT	DIST	NAV	TOTAL VALUE	UNFUNDED	NET DPI	NET TVM	NET IRR
Actis Energy 4	Dec-2016	2016	Global	$12.9	$12.9	$16.0	$2.5	$18.5	$4.9	1.2x	1.4x	14.0%
Ardian Infra Fund V Co-Invest Eden	Feb-2022	2022	OECD	$3.6	$3.6	$0.0	$4.0	$4.0	$0.0	NM	NM	NM
Ardian Infra Fund V Co-Invest Lemon	Dec-2022	2022	OECD	$2.8	$2.5	$0.0	$2.6	$2.6	$0.3	NM	NM	NM
Ardian Infrastructure Fund V B	Mar-2019	2019	OECD	$15.1	$10.5	$0.4	$12.4	$12.8	$4.7	0.0x	1.2x	15.7%
ASF VII Infrastructure L.P.	Apr-2017	2016	OECD	$15.0	$11.6	$4.5	$12.5	$17.0	$3.6	0.4x	1.5x	15.7%
ASF VIII Infrastructure B L.P.	Aug-2021	2021	Global	$32.0	$3.7	$0.7	$3.5	$4.1	$28.3	NM	NM	NM
Axium Infrastructure North America (2017)	Aug-2017	2017	North America	$15.2	$15.9	$4.7	$17.0	$21.7	$0.0	0.3x	1.4x	8.6%
Axium Infrastructure North America (2021)	Sep-2021	2021	North America	$23.2	$23.7	$0.8	$23.9	$24.7	$0.0	NM	NM	NM
Basalt Infrastructure Partners IV A L.P.	Oct-2022	2022	Global	$26.6	$0.0	$0.0	$0.0	$0.0	$26.6	NM	NM	NM
BIS NYC Infrastructure Emerging Manager Opportunities Fund, L.P.	Jul-2020	2020	Global	$15.0	$3.5	$0.0	$3.7	$3.7	$11.5	0.0x	1.1x	5.6%
Blackrock Global Infrastructure Fund IV	Jun-2022	2022	Global	$25.0	$1.6	$0.0	$1.4	$1.4	$23.4	NM	NM	NM
Brookfield Infrastructure Fund II, L.P.	Jul-2013	2013	Global	$15.0	$13.5	$14.0	$12.8	$26.9	$2.7	1.0x	2.0x	12.9%
Brookfield Infrastructure Fund III Co-Inv (aka Cardinal NR Sidecar)	Oct-2018	2018	North America	$2.1	$2.1	$0.7	$3.2	$3.9	$0.0	0.3x	1.9x	17.5%
Brookfield Infrastructure Fund III, L.P.	Apr-2016	2016	Global	$19.0	$14.9	$5.2	$15.8	$21.0	$6.6	0.3x	1.4x	10.5%
Brookfield Infrastructure Fund IV Co-Investment (Snow)	Oct-2019	2019	Global	$2.0	$2.0	$0.3	$2.9	$3.2	$0.0	0.1x	1.6x	15.5%
Brookfield Infrastructure Fund IV, L.P.	May-2019	2019	OECD	$21.0	$20.0	$4.3	$21.3	$25.6	$2.4	0.2x	1.3x	13.4%
Brookfield Infrastructure Fund V, LP	Jul-2022	2022	North America	$26.6	$0.0	$0.0	($0.2)	($0.2)	$26.6	NM	NM	NM
DIF Infrastructure VII SCSp	Nov-2022	2022	Global	$27.2	$0.0	$0.0	($0.4)	($0.4)	$27.2	NM	NM	NM
EQT Infrastructure III (No.2) SCSp	Feb-2017	2017	Global	$11.3	$12.9	$17.7	$6.3	$24.0	$0.6	1.4x	1.9x	20.9%
EQT Infrastructure IV (No.2) USD SCSp	Dec-2018	2018	OECD	$20.0	$18.3	$3.2	$20.6	$23.8	$3.8	0.2x	1.3x	11.6%
EQT Infrastructure IV Co-Investment (B) SCSp (Saber)	Jul-2019	2020	OECD	$1.8	$1.8	$0.1	$2.2	$2.3	$0.0	0.1x	1.3x	8.9%
EQT Infrastructure IV Co-Investment (F) SCSp (Connect)	Aug-2020	2020	Global	$3.7	$3.4	$0.0	$5.7	$5.7	$0.3	0.0x	1.7x	28.1%
EQT Infrastructure IV Co-Investment (G) SCSp (Lightspeed)	Jun-2020	2020	OECD	$3.1	$3.1	$0.0	$4.0	$4.0	$0.0	0.0x	1.3x	10.2%
EQT Infrastructure V (No.2) USD SCSp	Oct-2020	2020	Global	$40.0	$28.5	$2.9	$27.9	$30.8	$14.0	NM	NM	NM
EQT Infrastructure VI (No.2) USD SCSp	Mar-2023	2023	Global	$27.0	$0.0	$0.0	$0.0	$0.0	$27.0	NM	NM	NM
Global Energy & Power Infrastructure Fund II	Apr-2014	2014	OECD	$10.0	$10.9	$10.8	$3.3	$14.2	$0.3	1.0x	1.3x	13.8%
Global Energy & Power Infrastructure Fund III, L.P.	Jul-2018	2019	OECD	$17.2	$15.1	$2.8	$15.5	$18.3	$3.0	0.2x	1.2x	13.4%
Global Infrastructure Partners III-A/B, L.P.	Jan-2016	2016	OECD	$22.0	$22.5	$10.5	$22.9	$33.4	$2.4	0.5x	1.5x	10.4%
Global Infrastructure Partners IV-A/B, L.P.	Mar-2019	2018	OECD	$24.7	$18.9	$0.1	$20.1	$20.3	$7.0	0.0x	1.1x	5.9%

* Performance of funds with less than two years of activity is not considered meaningful.

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SCHEDULE OF INVESTMENTS CONTINUED

As of March 31, 2023. In USD millions.

INVESTMENT	CLOSING DATE	VINTAGE YEAR	GEO FOCUS	COMMIT	CONT	DIST	NAV	TOTAL VALUE	UNFUNDED	NET DPI	NET TVM	NET IRR
Global Infrastructure Partners V-A/B, L.P.	Mar-2023	2023	OECD	$27.0	$0.0	$0.0	$0.0	$0.0	$27.0	NM	NM	NM
IFM Global Infrastructure Fund	Jan-2014	2014	OECD	$10.0	$13.4	$6.1	$20.0	$26.0	$0.0	0.5x	2.0x	11.7%
InfraVia European Fund V SCSp	Feb-2022	2022	OECD	$23.9	$6.4	$0.1	$6.1	$6.2	$17.5	NM	NM	NM
KKR Global Infrastructure Investors II L.P.	Jun-2015	2014	OECD	$12.0	$12.9	$18.5	$5.8	$24.4	$0.5	1.4x	1.9x	18.4%
KKR Global Infrastructure Investors III L.P.	Mar-2018	2018	OECD	$17.2	$15.1	$3.9	$14.2	$18.1	$2.9	0.3x	1.2x	8.8%
KKR Global Infrastructure Investors IV (USD) SCSp	May-2021	2021	Global	$35.0	$14.7	$0.2	$13.8	$13.9	$20.5	NM	NM	NM
NYCRS EIG Energy Partners Co-Investment, L.P.	Jan-2018	2022	North America	$3.8	$0.0	$0.0	$0.0	$0.0	$3.8	NM	NM	NM
NYCRS EIG Energy Partners, L.P.	Aug-2017	2017	North America	$15.3	$9.3	$5.3	$5.5	$10.8	$6.8	0.6x	1.2x	7.6%
Stonepeak Infrastructure Fund IV, L.P.	Feb-2021	2021	North America	$35.0	$15.4	$0.1	$16.8	$16.9	$19.6	NM	NM	NM
Stonepeak Patagonia (Co-Invest) Holdings LP (Project Panther)	Dec-2021	2021	North America	$5.7	$5.1	$0.0	$5.9	$5.9	$0.6	NM	NM	NM
Stonepeak Tiger (Co-Invest) Holdings (I-B) LP	Apr-2021	2021	North America	$4.0	$3.4	$0.0	$3.4	$3.4	$0.6	NM	NM	NM
Total				**$668.8**	**$373.1**	**$134.0**	**$358.9**	**$492.9**	**$326.9**	**0.4x**	**1.3x**	**12.3%**

* Performance of funds with less than two years of activity is not considered meaningful.

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RISK MANAGEMENT MATRIX

Category	Requirement	Status	Status Notes
Allocation	NYCFDPF has an Infrastructure allocation target of 3% of total pension assets.	✓	The market value of NYCFDPF Infrastructure Program represented approximately 1.9% of total pension assets
Performance vs. Benchmarks	The performance benchmark for the Infrastructure Portfolio is to meet or exceed: (i) The Consumer Price Index ("CPI") plus 4% net of fees over a rolling 5-year period and (ii) A dollar-weighted PME+ ("PME") calculation of daily changes in 50% of the Russell 3000® Index and 50% of the Barclays U.S. Aggregate® Index. The Infrastructure Portfolio is expected to generate a total return, net of investment management fees, of at least 6.5%	✓	As of March 31, 2023, the Portfolio outperformed the CPI and PME benchmark by 4.4% and 7.1%, respectively.
Strategy Diversification	Core Infrastructure Investments: 60-100% Non-Core Infrastructure Investments: 0-40% Actual percentages may differ substantially from these targets during the initial years of the Program.	✓	The Program is in compliance with the Core/Non-Core allocation ranges. Currently the Program has 82.5% exposure to Core investments and 17.5% exposure to Non-Core investments.
Asset Type & Location Diversification	The Program will seek diversification by asset type, revenue drivers, and geography. The portfolio may include a variety of assets including but not limited to electricity transmission, pipelines, airports, toll roads, communication towers and electric generators, windmills etc. to vary the sources of revenue to the portfolio.	✓	The asset types and geographic location of current Portfolio investments are in compliance with the Program's Investment Policy Statement and Permissible Markets.
Leverage	The average leverage of all investments in the Program is to be no higher than 65%.	✓	The Program is in compliance with the average leverage limitation. The current leverage level is 37%.
Single Investment Size & Manager Diversification	The maximum commitment to a single investment is limited to no more than 15% of the aggregate committed capital of each fund. The maximum commitment to a single manager is limited to 20% of the total Infrastructure Program allocation when fully invested.	✓	On the individual fund level, all current investments are in compliance with the single investment limitation of 15% of total fund size. The Program is in compliance with the single manager limitation of 20% of the total Infrastructure Program.

[1]The Program's leverage level is calculated by using a weighted average of each underlying investment's leverage and Net Asset Value as of March 31, 2023.

APPENDIX

MARKET UPDATE

North America

Notable transactions completed and announced over the quarter include:

- Brookfield Super-Core Infrastructure entered into a definitive agreement to acquire an additional 30% stake in FirstEnergy Transmission from First Energy Corp. for US$3.5 billion. Brookfield's purchased a 19.9% stake in FirstEnergy Transmission in May 2022
- EQT Active Core Infrastructure and PSP announced the take-private acquisition of Radius Global Infrastructure for a total enterprise value of US$3.0 billion. Radius owns and acquires critical digital infrastructure, including ground, tower, rooftop, and in-building cell sites, in over 20 countries
- Stonepeak completed its acquisition of Intrado Life & Safety from Apollo Global Management for US$2.4 billion. Intrado Life & Safety provides public emergency telecommunications services with a 40-year track record of connecting citizens to 911 services
- A subsidiary of Hydro-Québec completed its acquisition of a 100% stake in Great River Hydro from ArcLight Energy Partners for US$2.0 billion. Great River Hydro owns 13 hydropower generating stations with a combined installed capacity of 589MW
- A Consortium led by Invenergy, including CDPQ and Blackstone, entered an agreement to acquire a 1.4GW portfolio of renewable assets (10 wind and four solar assets) that are unregulated, contracted, and operational, from American Electric Power for US$1.5 billion
- Vistra Corp. executed a definitive agreement to acquire Energy Harbor Corp. for US$3.43 billion, composed of US$3 billion in cash and a 15% stake in a newly-formed subsidiary named Vistra Vision. Vistra Vision will merge each company's nuclear and retail businesses with a portfolio of existing renewable and storage projects. Following the transaction, Vistra will own the second-largest competitive nuclear fleet in the US
- KKR's credit and infrastructure funds committed an additional US$1.15 billion to expand Altavair's global portfolio of leased commercial aircraft. KKR acquired a 50% stake in Altavair in 2019. The company acquires, leases, re-purposes, and sells commercial jet aircraft and engines
- ACS Group acquired a total of ~57% stake in a Texas toll road SH-288 for US$1.15 billion from Israel's Clal Insurance, InfraRed Capital Partners, Northleaf Capital Partners, and Star America
- Silicon Ranch closed a US$600 million equity raise led by Manulife Investment Management, TD Greystone Fund, and Mountain Group Partners. Silicon Ranch owns 5GW of contracted solar and battery storage systems across the US and Canada
- Brookfield Global Transition Fund invested up to US$500 million of growth capital into California Bioenergy. California Bioenergy partners with dairy farmers to design, build, own, and operate renewable natural gas projects via 50 operational manure digesters

Europe

During the quarter, the European infrastructure market continued in line with 2022 activity. Some notable transactions were completed in the Renewables, Power & Utilities and Transport sector.

- KKR has agreed to sell a 50% stake in renewable energy developer X-Elio to co-shareholder Brookfield for an implied price of US$900 million, valuing the company at US$1.8 billion. The remaining 50% stake will be acquired by Brookfield as a follow-on investment through the original fund investment
- Arjun Infrastructure Partners has invested €300 million, acquiring a 30% stake in Amarenco, an independent, solar-focused power producer. Amarenco owns ~400MW of operating solar plants and recently expanded its portfolio with the acquisition of Infracapital's 90% stake in Infram, a French solar JV
- GIC has invested ~€1 billion into Portuguese utility operator, EDP's, renewables arm, as part of an equity raise. GIC subscribed to 43 million of the 51 million shares available
- Lightsource bp has agreed to sell a solar PV portfolio in Spain to Spanish managers Plenium Partners. The value of the transaction has not been disclosed but is estimated to be worth ~€300 million. Lightsource bp's Spanish portfolio includes ~250MW of operational solar PV
- CVC Capital Partners has agreed to sell PKP Energetyka, a Polish electricity distribution network serving rail networks, to state-owned power company PGE. The deal valued the company at an enterprise value of PLN 5.94 billion (~€1.27 billion) implying an EBITDA multiple of ~8.5x. The equity price was PLN 1.9 billion (~€0.4 billion), with the remainder of the transaction funded by debt
- Macquarie Asset Management ("MAM") has agreed to sell its 25% stake in Energie Steiermark ("ESTAG") an Austrian natural gas and electricity grid network, to the Provincial Government of Stryia for €525 million. ESTAG operates a 31,300km electricity grid and a 4,200km natural gas supply network
- MAM has also agreed to sell its 24% stake in Open Grid Europe ("OGE"), to Belgian gas transmission operator, Fluxys. Both parties declined to disclose pricing, however, the stake has an estimated valuation of €800 million. OGE has a regulated asset base of ~€4 billion
- Macquarie AirFinance ("MAF") announced a US$2.2 billion fleet acquisition from Kuwait's Aviation Lease and Finance Company. MAF's shareholders, Macquarie Asset Management, PGGM Infrastructure Fund and Australian Retirement Trust are providing US$600 million of equity to fund the acquisition of 53 passenger aircraft and an order of 20 Boeing 737 MAX aircraft
- Alpen Glasfaser, a €1 billion Austrian fiber JV between Meridiam and Magenta Telekom has been approved by the EU Commission. The company will now begin to roll out a fiber network across 650,000 homes primarily in rural areas and medium-sized towns in Austria

Australia

Australia and New Zealand infrastructure market activity remained robust during the first quarter of 2023. Energy and renewables activity has been particularly prevalent over the past six months, contrasted against a gradual slowdown in telecommunications sector activity following several major transactions reaching financial close during 2022

Notable transactions occurring during the quarter included the following:

- Brookfield Asset Management and EIG Global Energy Partner's bid to take ASX listed Origin Energy private. During the quarter, GIC and Temasek joined the bidding consortium and in February, it announced a binding Scheme Implementation Deed to take Origin private. At A$8.9/share the deal represents an enterprise value of ~A$18.7 billion. Take-private of Origin is subject to customary regulatory review and approval processes before it can close
- Financial close was reached for Partners Group's sale of its A$4 billion portfolio of renewables assets, CWP Renewables, to Squadron Energy. CWP Renewables' portfolio represents 1.1GW of operational onshore wind assets, a construction ready 414MW wind farm and 30MW battery project
- Electricity distribution and transmission business Spark Infrastructure progressed the carve-out of its renewables development platform, Spark Renewables, shortlisting three proponents including APA Group, Engie and Tenaga Nasional
- Greenfield renewables activity was buoyed by an Acciona led JV reaching financial close on the 1.02GW MacIntyre Wind Precinct in Queensland Australia. The 180 turbine precinct is expected to cost A$1.96 billion, for which A$1.1 billion in financing was raised through a green loan provided by a range of international lenders
- Palisade Investment Partners launched an ~A$1.1 billion debt refinancing linked to its renewables portfolio, whilst Igneo Infrastructure Partners reached financial close on an ~A$990 million partial refinancing of its Atmos Renewables solar and wind portfolio
- In the telecommunications sector, TPG received RFPs from Uniti Group, Vocus Communications and Pacific Equity Partners for the sale of its fiber-to-the-building ("FTTB") wholesale broadband business, following its functional separation from TPG. The FTTB business, Vision Network, has ~135,000 customers and its network passes ~400,000 connections. Research analysts estimate the value of Vision Network at ~A$950 million
- In the transport sector, a consortium of investors led by New Zealand Superannuation Fund launched the sale of its stake in the Melbourne based toll-road concession owner, ConnectEast Group. ConnectEast Group owns the 40km EastLink toll road concession and was listed up until 2011 when it was acquired for A$2 billion. The motorway opened on June 29, 2008 and the concession expires on November 30, 2043
- A JV comprised of M Infrastructure Group an PT Asian Bulk Logistics reached financial close on the acquisition of Australian east coast rail haulage business, OneRail, from Aurizon

New York City Fire Pension Fund, Subchapter 2
Infrastructure Portfolio
As of March 31, 2023

Vintage Year	Investment	Closing Date	Committed Capital	Contributed Capital	Distributed Capital	Market Value	Unfunded	TVPI	IRR
Active Investments:									
2013	Brookfield Infrastructure Fund II, L.P.	7/8/2013	$15,000,000	$13,473,867	$14,043,732	$12,846,212	$2,653,541	2.0x	12.9%
2014	IFM Global Infrastructure Fund	1/2/2014	$10,000,000	$13,351,525	$6,068,588	$19,971,599	-	2.0x	11.7%
2014	Global Energy & Power Infrastructure Fund II	4/16/2014	$10,000,000	$10,907,448	$10,817,939	$3,346,466	$298,273	1.3x	13.8%
2014	KKR Global Infrastructure Investors II L.P.	6/12/2015	$12,000,000	$12,942,582	$18,548,159	$5,830,635	$507,475	1.9x	18.4%
2016	Global Infrastructure Partners III-A/B, L.P.	1/29/2016	$22,000,000	$22,489,429	$10,472,649	$22,880,253	$2,387,940	1.5x	10.4%
2016	Brookfield Infrastructure Fund III, L.P.	4/15/2016	$19,000,000	$14,850,225	$5,191,860	$15,777,198	$6,569,310	1.4x	10.5%
2016	Actis Energy 4	12/16/2016	$12,900,000	$12,917,957	$16,038,275	$2,451,000	$4,892,744	1.4x	14.0%
2017	EQT Infrastructure III (No.2) SCSp	2/18/2017	$11,295,436	$12,916,975	$17,697,664	$6,258,922	$634,946	1.9x	20.9%
2016	ASF VII Infrastructure L.P.	4/24/2017	$15,000,000	$11,646,693	$4,526,402	$12,495,432	$3,620,989	1.5x	15.7%
2017	Axium Infrastructure North America (2017)	8/14/2017	$15,220,450	$15,918,095	$4,735,268	$17,013,622	-	1.4x	8.6%
2017	NYCRS EIG Energy Partners, L.P.	8/14/2017	$15,300,000	$9,317,658	$5,342,351	$5,459,774	$6,762,188	1.2x	7.6%
2022	NYCRS EIG Energy Partners Co-Investment, L.P.	1/12/2018	$3,820,000	-	-	-	$3,820,000	-	0.0%
2018	KKR Global Infrastructure Investors III L.P.	3/29/2018	$17,200,000	$15,129,270	$3,908,151	$14,186,007	$2,937,487	1.2x	8.8%
2019	Global Energy & Power Infrastructure Fund III, L.P.	7/3/2018	$17,200,000	$15,090,993	$2,831,907	$15,480,917	$2,989,759	1.2x	13.4%
2018	Cardinal NR Sidecar Holdings L.P.	10/5/2018	$2,060,000	$2,073,914	$684,856	$3,244,302	-	1.9x	17.5%
2018	EQT Infrastructure IV (No.2) USD SCSp	12/20/2018	$20,000,000	$18,344,440	$3,194,790	$20,602,182	$3,841,008	1.3x	11.6%
2019	Ardian Infrastructure Fund V B	3/4/2019	$15,112,423	$10,456,999	$404,117	$12,441,819	$4,716,494	1.2x	15.7%
2018	Global Infrastructure Partners IV-A/B, L.P.	3/11/2019	$24,700,000	$18,919,302	$111,842	$20,140,740	$7,045,276	1.1x	5.9%
2019	Brookfield Infrastructure Fund IV, L.P.	5/10/2019	$21,000,000	$19,959,005	$4,257,529	$21,298,678	$2,419,955	1.3x	13.4%
2020	EQT Infrastructure IV Co-Investment (B) SCSp (Saber)	7/30/2019	$1,800,000	$1,818,000	$109,250	$2,228,897	-	1.2x	8.9%
2019	Brookfield Infrastructure Fund IV Co-Investment (Snow)	10/25/2019	$2,000,000	$2,010,258	$287,147	$2,883,393	-	1.6x	15.5%
2020	EQT Infrastructure IV Co-Investment (G) SCSp (Lightspeed)	6/11/2020	$3,068,600	$3,078,707	-	$4,008,549	-	1.3x	10.2%
2020	BIS NYC Infrastructure Emerging Manager Opportunities Fund, L.P.	7/3/2020	$14,980,000	$3,484,669	-	$3,674,143	$11,495,331	1.1x	5.6%
2020	EQT Infrastructure IV Co-Investment (F) SCSp (Connect)	8/18/2020	$3,700,000	$3,369,846	-	$5,720,850	$341,291	1.7x	28.1%
2020	EQT Infrastructure V (No.2) USD SCSp	10/29/2020	$40,000,000	$28,464,588	$2,924,578	$27,910,912	$13,972,557	1.1x	9.0%
2021	Stonepeak Infrastructure Fund IV, L.P.	2/16/2021	$35,000,000	$15,433,317	$98,950	$16,773,781	$19,568,852	1.1x	9.1%
2021	Stonepeak Tiger (Co-Invest) Holdings (I-B) LP	4/16/2021	$4,000,000	$3,384,224	-	$3,415,543	$615,776	1.0x	0.6%
2021	KKR Global Infrastructure Investors IV (USD) SCSp	5/24/2021	$35,000,000	$14,696,238	$185,486	$13,754,693	$20,491,765	0.9x	-8.5%
2021	ASF VIII Infrastructure B L.P.	8/3/2021	$32,000,000	$3,706,522	$659,268	$3,450,880	$28,293,478	1.1x	11.9%
2021	Axium Infrastructure North America (2021)	9/3/2021	$23,224,005	$23,695,535	$761,435	$23,890,497	-	1.0x	8.6%
2021	Stonepeak Patagonia (Co-Invest) Holdings LP (Project Panther)	12/10/2021	$5,661,000	$5,107,725	-	$5,923,071	$553,275	1.2x	24.6%
2022	Ardian Infra Fund V Co-Invest Eden	2/21/2022	$3,597,889	$3,597,889	-	$4,015,591	-	NM	NM
2022	InfraVia European Fund V SCSp	2/25/2022	$23,860,527	$6,360,691	$119,786	$6,076,548	$17,455,593	NM	NM
2022	Blackrock Global Infrastructure Fund IV	6/30/2022	$25,000,000	$1,640,515	-	$1,405,212	$23,359,485	NM	NM
2022	Brookfield Infrastructure Fund V, LP	7/18/2022	$26,580,000	-	-	($184,727)	$26,580,000	NM	NM
2022	Basalt Infrastructure Partners IV A L.P.	10/7/2022	$26,600,000	-	-	-	$26,600,000	NM	NM
2022	DIF Infrastructure VII SCSp	11/15/2022	$27,168,745	-	-	($360,541)	$27,168,745	NM	NM
2022	Ardian Infra Fund V Co-Invest Lemon	12/22/2022	$2,767,352	$2,514,917	-	$2,573,630	$282,555	NM	NM
2023	EQT Infrastructure VI (No.2) USD SCSp	3/1/2023	$27,000,000	-	-	-	$27,000,000	NM	NM
2023	Global Infrastructure Partners V-A/B, L.P.	3/31/2023	$27,000,000	-	-	-	$27,000,000	NM	NM
Total			**$668,816,427**	**$373,070,019**	**$134,021,978**	**$358,886,682**	**$326,876,089**	**1.3x**	**12.3%**

Note: IRRs presented are interim estimates and may not be indicative of the ultimate performance of fund investments due to a number of factors, such as the lack of industry valuation standards and the differences in the investment pace and strategy of various funds. Until a fund is liquidated, typically over 10 to 12 years, the IRR is only an interim estimated return. The IRR calculated in the early years of a fund is usually not meaningful given the J-Curve effect. The actual IRR performance of any fund is not known until all capital contributed and earnings have been distributed to the investor. The IRRs contained in this report are calculated by StepStone Group LP, a consultant to the New York City Retirement Systems, based on information provided by the general partners of each investment (e.g. cash flows and valuations). The IRR calculations and other information contained in this report have not been reviewed or confirmed by the general partners. The result of the IRR calculation may differ from that generated by the general partner or other limited partners. Differences in IRR calculations can be affected by cash-flow timing, the accounting treatment of carried interest, fund management fees, advisory fees, organizational fees, other fund expenses, sale of distributed stock, and valuations.

Risk Quarterly Report (Public):

BarraOne Total Plan Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: FIRE_Plan3
BENCHMARK: FIRE_Policy3
POSITIONS: 14,996

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 18,477,165,551
ACCEPTED: 14,848

Total Plan Summary

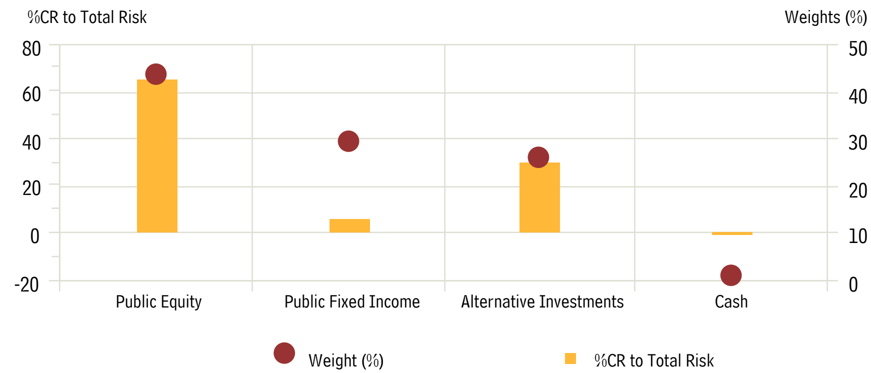
Risk Summary

Statistic	Value
Total Risk	11.52
Benchmark Risk	10.70
Active Risk	1.85
Portfolio Beta	1.07
Effective Duration	1.86

Asset Class Contribution to Risk

Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total	**18,477,165,551**	**100.00**	**11.52**	**11.52**	**100.00**
Public Equity	8,036,613,401	43.49	17.50	7.44	64.61
Public Fixed Income	5,416,039,279	29.31	5.32	0.69	6.00
Alternative Investments	4,847,366,978	26.23	13.75	3.39	29.39
Cash	177,145,893	0.96	0.04	-0.00	-0.00

Asset Class Allocation

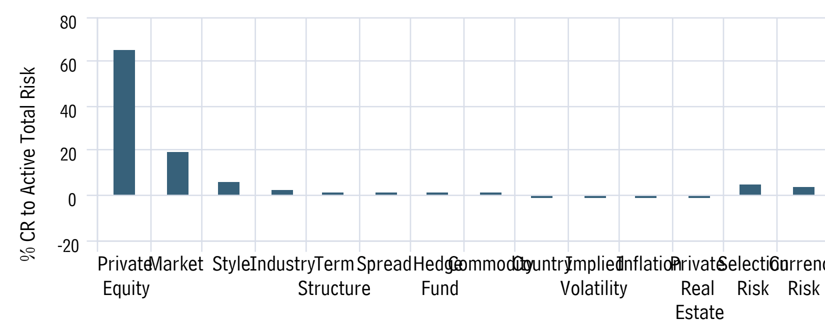


Risk Factor Breakdown

Risk Decomposition

Risk Source	Portfolio Risk Contribution	Portfolio % Risk	Portfolio Correlation	Active Risk Contribution	Active % Risk	Active Correlation
Total Risk	**11.52**	**100.00**	**1.00**	**1.85**	**100.00**	**1.00**
Local Market Risk	10.92	94.79	1.00	1.78	96.22	0.99
Common Factor Risk	10.89	94.52	1.00	1.68	91.06	0.96
Private Real Estate	0.59	5.15	0.70	-0.03	-1.58	-0.07
Implied Volatility	0.01	0.12	0.45	-0.00	-0.05	-0.16
Industry	0.08	0.68	0.17	0.05	2.78	0.22
Inflation	0.08	0.70	0.41	-0.02	-0.92	-0.19
Market	9.09	78.90	0.97	0.35	18.73	0.42
Private Equity	0.19	1.68	0.13	1.21	65.22	0.81
Spread	0.54	4.65	0.70	0.01	0.33	0.12
Style	0.08	0.68	0.24	0.11	5.79	0.31
Term Structure	0.23	1.96	0.13	0.01	0.50	0.12
Selection Risk	0.03	0.27	0.05	0.10	5.16	0.23
Currency Risk	0.60	5.21	0.58	0.07	3.78	0.28

Active Risk from Risk Factors



BarraOne Total Plan Summary

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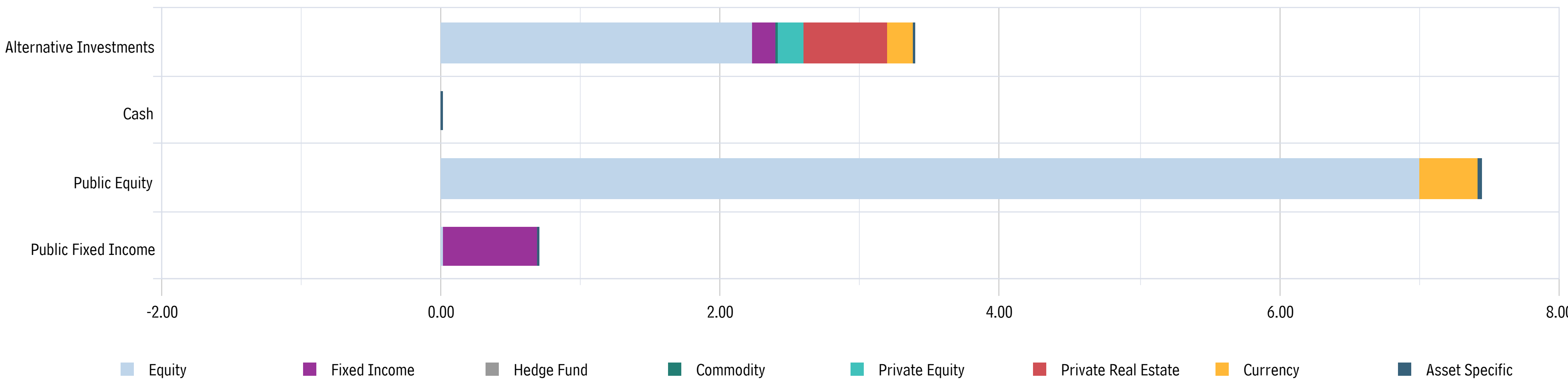
Risk Contribution Breakdown by Risk Type

							Risk Contribution							
Asset Name	Mkt Value	Weight (%)	Eff Weight (%)	Total Risk	%CR to Total Risk	Port Risk Contribution	Equity	Fixed Income	Hedge Fund	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific
Total	**18,477,165,551**	**100.00**	**-**	**11.52**	**100.00**	**11.52**	**9.24**	**0.86**	**0.00**	**0.00**	**0.59**	**0.19**	**0.60**	**0.03**
Alternative Investments	4,847,366,978	26.23	-	13.75	29.39	3.39	2.23	0.17	0.00	0.00	0.59	0.19	0.19	0.00
Cash	177,145,893	0.96	-	0.04	-0.00	-0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Equity	8,036,613,401	43.49	-	17.50	64.61	7.44	7.00	-0.00	0.00	0.00	0.00	0.00	0.41	0.03
Public Fixed Income	5,416,039,279	29.31	-	5.32	6.00	0.69	0.01	0.68	0.00	0.00	0.00	0.00	0.00	0.00



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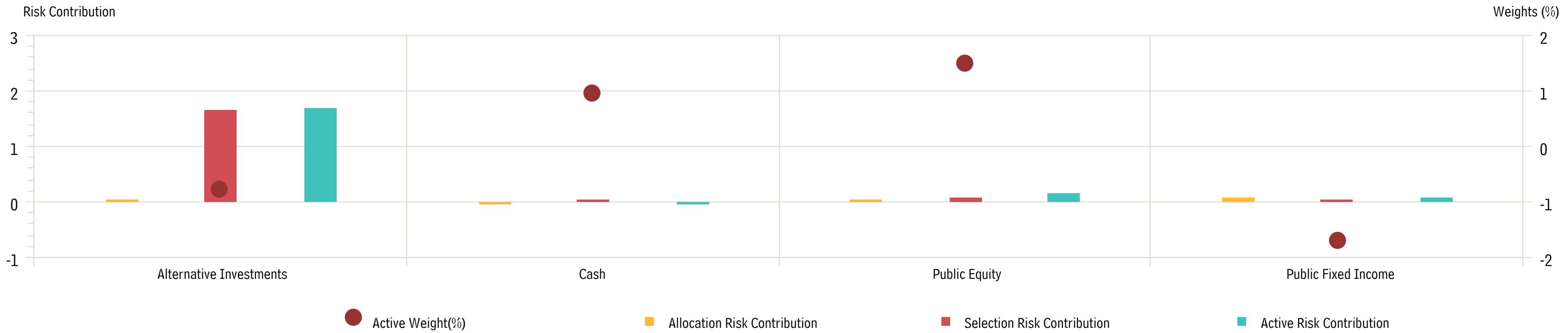
Allocation Selection

		Allocation			Selection			Active
Asset Class	Active Weight(%)	Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	Risk Contribution
Active Total Risk				**0.08**			**1.77**	**1.85**
Alternative Investments	-0.77	3.12	-0.23	**0.01**	6.55	0.97	**1.67**	**1.67**
Cash	0.96	10.71	-0.38	**-0.04**	0.26	0.08	**0.00**	**-0.04**
Public Equity	1.49	7.22	0.44	**0.05**	0.82	0.26	**0.09**	**0.14**
Public Fixed Income	-1.69	9.54	-0.39	**0.06**	0.16	0.23	**0.01**	**0.07**



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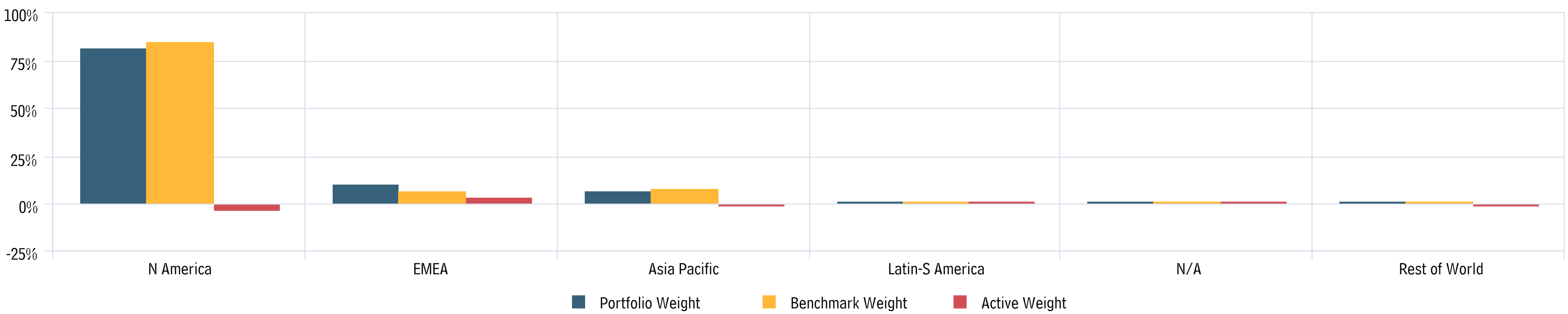
Portfolio Allocation by Region

	Weight (%)						
Region	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
Total	**100.00**	**100.00**	**-0.00**	**11.52**	**1.85**	**100.00**	**0.02**
N America	81.46	84.40	-2.94	10.86	1.56	84.33	0.01
EMEA	9.99	7.09	2.90	17.89	0.27	14.67	0.04
Asia Pacific	6.96	7.56	-0.60	17.04	0.00	0.12	0.02
Latin-S America	0.70	0.57	0.13	25.33	0.00	0.10	0.04
N/A	0.59	0.00	0.59	21.42	0.01	0.68	0.02
Rest of World	0.30	0.38	-0.08	8.97	0.00	0.10	-0.02



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Top 30 Countries by Weight%

	Weight (%)						
Country of Exposure	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
Total	**100.00**	**100.00**	**-0.00**	**11.52**	**1.85**	**100.00**	**0.02**
United States	79.57	82.73	-3.16	10.78	1.51	81.76	0.01
United Kingdom	2.79	1.60	1.19	17.28	0.09	4.91	0.03
China International	1.43	1.48	-0.06	30.60	-0.01	-0.28	0.02
Japan	1.42	1.91	-0.49	16.84	-0.00	-0.04	0.01
Canada	1.16	1.49	-0.34	14.18	0.02	0.94	0.02
France	1.14	1.05	0.09	19.83	0.01	0.70	0.05
India	1.10	0.90	0.21	19.93	0.01	0.35	0.02
Germany	1.10	0.75	0.35	20.36	0.02	1.31	0.05
Taiwan	0.90	0.94	-0.04	26.50	0.00	0.14	0.03
Switzerland	0.86	0.86	0.00	17.65	0.02	0.94	0.03
S. Korea	0.82	0.74	0.08	25.54	0.00	0.20	0.04
Netherlands	0.78	0.48	0.30	23.03	0.02	1.30	0.06
Brazil	0.61	0.35	0.27	32.43	0.01	0.66	0.05
Sweden	0.46	0.26	0.20	26.63	0.02	1.17	0.08
Italy	0.46	0.31	0.15	21.50	0.01	0.75	0.04
Denmark	0.45	0.25	0.21	21.27	0.02	0.92	0.04
Australia	0.43	0.66	-0.23	21.01	-0.01	-0.34	0.04
Hong Kong	0.42	0.24	0.19	21.93	0.00	0.19	0.00
Euro. Monetary Union	0.42	0.00	0.42	25.80	0.03	1.55	0.06
Spain	0.41	0.24	0.17	18.40	0.01	0.75	0.05
Hong Kong	0.38	0.00	0.38	28.12	0.00	0.26	0.01
Ireland	0.28	0.24	0.03	13.97	0.00	0.17	0.01
China	0.24	0.30	-0.06	24.34	0.00	0.22	-0.01
N/A	0.21	0.00	0.21	17.39	0.01	0.41	0.04
Singapore	0.21	0.12	0.09	15.10	0.00	0.07	0.01
Luxembourg	0.20	0.19	0.01	8.23	0.00	0.01	-0.02
Belgium	0.17	0.11	0.07	17.22	0.00	0.13	0.02
Indonesia	0.17	0.11	0.05	22.49	0.00	0.08	0.02
Thailand	0.15	0.12	0.03	22.83	0.00	0.08	0.02
Mexico	0.15	0.18	-0.03	21.65	-0.00	-0.07	0.03

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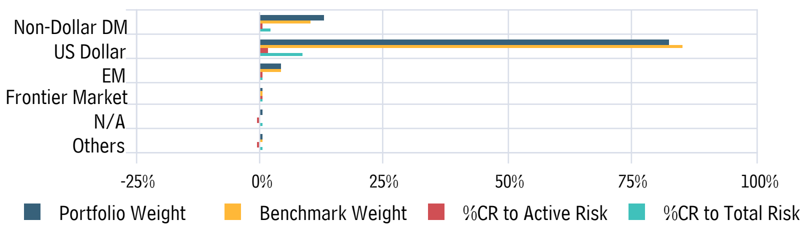
Portfolio Allocation by Currency

Exposure by Market



Developed Market Currency

Top Five	Exposure $	CR to AR (%)	CR to TR (%)
US Dollar	15,200,376,412.24	83.27	74.99
Euro	872,805,541.96	7.18	7.32
British Pound Sterling	404,413,498.67	5.13	3.38
Hong Kong Dollar	300,712,177.78	0.06	2.03
Japanese Yen	257,556,033.15	-0.21	1.48

Emerging Market Currency

Top Five	Exposure $	CR to AR (%)	CR to TR (%)
Indian Rupee	201,105,227.42	0.34	1.13
New Taiwan Dollar	165,990,888.74	0.14	1.28
Korean Won	146,931,062.31	0.15	1.32
Brazilian Real	111,466,833.39	0.66	0.88
Chinese Yuan	43,359,324.64	0.21	0.26

Top 15 Currencies by Weight%

	Weight (%)							
Currency of Exposure	Portfolio	Benchmark	Active	Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
Total	**100.00**	**100.00**	**-0.00**	**11.52**	**11.52**	**100.00**	**1.85**	**100.00**
US Dollar	82.27	85.13	-2.87	10.62	8.64	74.99	1.54	83.27
Euro	4.72	2.74	1.98	20.30	0.84	7.32	0.13	7.18
British Pound Sterling	2.19	1.19	1.00	21.19	0.39	3.38	0.09	5.13
Hong Kong Dollar	1.63	1.60	0.02	30.38	0.23	2.03	0.00	0.06
Japanese Yen	1.39	1.81	-0.41	17.19	0.17	1.48	-0.00	-0.21
Indian Rupee	1.09	0.88	0.21	20.19	0.13	1.13	0.01	0.34
New Taiwan Dollar	0.90	0.94	-0.04	26.57	0.15	1.28	0.00	0.14
Swiss Franc	0.81	0.81	-0.00	17.15	0.11	0.99	0.01	0.63
Korean Won	0.80	0.74	0.06	25.53	0.15	1.32	0.00	0.15
Canadian Dollar	0.74	0.94	-0.20	20.73	0.14	1.19	0.01	0.67
Brazilian Real	0.60	0.33	0.27	32.80	0.10	0.88	0.01	0.66
Danish Krone	0.45	0.25	0.21	21.30	0.07	0.64	0.02	0.92
Australian Dollar	0.39	0.59	-0.20	22.96	0.08	0.66	-0.01	-0.40
Swedish Krona	0.36	0.26	0.10	27.11	0.08	0.69	0.01	0.76
Chinese Yuan	0.23	0.29	-0.06	25.11	0.03	0.26	0.00	0.21

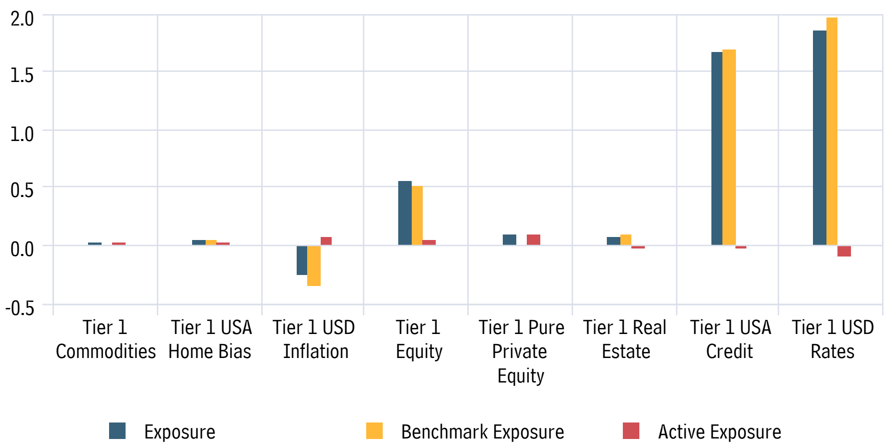
BarraOne Tier 1 USA Factor Summary

Tier 1 factors describe the most important drivers of the markets and provide a platform for the factor-based asset-allocation framework. They provide a lens for strategic asset allocation and are designed for board level reporting.

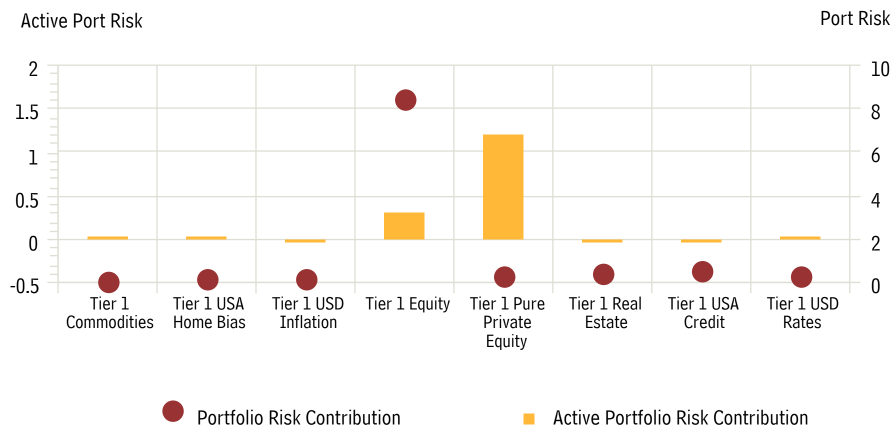
COMPANY: NYCRS - Fire Plan
PORTFOLIO: FIRE_Plan3
BENCHMARK: FIRE_Policy3
POSITIONS: 14,996
MODEL: MAC.L Tier 1 USA

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 18,477,165,551
ACCEPTED: 14,848

Macro Factor Exposures



Macro Factor Risk Contribution



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POSITIONS: 14,996
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ANALYSIS DATE: June 30, 2023
MARKET VALUE: 18,477,165,551
ACCEPTED: 14,848

Risk Decomposition

Risk Source	Exposure			Contribution			
	Exposure	Benchmark Exposure	Active Exposure	Portfolio Risk Contribution	% Portfolio Risk	Active Portfolio Risk Contribution	% Active Risk
Total Risk	**-**	**-**	**-**	**11.52**	**100.00**	**1.85**	**100.00**
Local Market Risk	-	-	-	10.92	94.79	1.78	96.22
Common Factor Risk	-	-	-	10.89	94.52	1.68	91.06
Commodity	-	-	-	0.00	0.04	0.00	0.14
Tier 1 Commodities	0.00	0.00	0.00	0.00	0.04	0.00	0.14
Country	-	-	-	0.16	1.37	0.01	0.44
Tier 1 USA Home Bias	0.05	0.04	0.01	0.16	1.37	0.01	0.44
Factor Residual Risk	-	-	-	0.95	8.22	0.21	11.59
Inflation	-	-	-	0.07	0.58	-0.01	-0.57
Tier 1 USD Inflation	-0.26	-0.34	0.07	0.07	0.58	-0.01	-0.57
Interaction within Common Factor	-	-	-	N/A	-	N/A	-
Market	-	-	-	8.40	72.92	0.30	16.43
Tier 1 Equity	0.56	0.52	0.04	8.40	72.92	0.30	16.43
Private Equity	-	-	-	0.19	1.68	1.20	65.02
Tier 1 Pure Private Equity	0.10	0.00	0.10	0.19	1.68	1.20	65.02
Private Real Estate	-	-	-	0.43	3.70	-0.04	-2.19
Tier 1 Real Estate	0.07	0.08	-0.02	0.43	3.70	-0.04	-2.19
Spread	-	-	-	0.45	3.95	-0.00	-0.23
Tier 1 USA Credit	1.67	1.70	-0.03	0.45	3.95	-0.00	-0.23
Term Structure	-	-	-	0.24	2.06	0.01	0.43
Tier 1 USD Rates	1.86	1.96	-0.10	0.24	2.06	0.01	0.43
Specific Risk	-	-	-	0.03	0.27	0.10	5.16
Currency Risk	-	-	-	0.60	5.21	0.07	3.78
Currency/Market Interaction	-	-	-	N/A	-	N/A	-

Tier 1 Macro Factor Scheme has six factors

Tier 1 Factor	Exposure Type	Description
Equity	Membership (weights)	USA Equity
Pure Private Equity	Membership (weights)	USA Private Equity
Real Estate	Membership (weights)	USA Real Estate
USA Credit	Sensitivities (durations)	Sensitive to USA credit spreads
USD Inflation	Sensitivities (durations)	Sensitive to USD inflation protected assets
USD Rates	Sensitivities (durations)	Sensitive to Govt rate exposure
Commodities	Membership (weights)	Sensitive to Commodities
USA Home Bias		USA Home Bias factor returns is very similar to that of a portfolio long the MSCI USA IMI index and short the currency-hedged MSCI ACWI ex-US IMI index.

Factor Residual Risk

Risk Source	Portfolio Risk Contribution	% Portfolio Risk	Active Portfolio Risk Contribution	% Active Risk
Basis	-0.00	-0.00	0.00	0.00
Commodity	-0.00	-0.02	-0.00	-0.02
Country	-0.00	-0.03	-0.00	-0.05
Hedge Fund	0.00	0.01	0.00	0.19
Implied Volatility	0.01	0.12	-0.00	-0.05
Industry	0.08	0.68	0.05	2.78
Inflation	0.01	0.11	-0.01	-0.35
Interaction within Factor Residual Risk	N/A	-	N/A	-
Market	0.53	4.61	0.03	1.86
Private Equity	0.00	0.01	0.00	0.20
Private Real Estate	0.17	1.45	0.01	0.61
Spread	0.08	0.70	0.01	0.56
Style	0.08	0.68	0.11	5.79
Term Structure	-0.01	-0.10	0.00	0.06

BarraOne Total Plan Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: FIRE_Plan3
BENCHMARK: FIRE_Policy3
POSITIONS: 14,996
MODEL: MAC.L
CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 18,477,165,551
ACCEPTED: 14,848

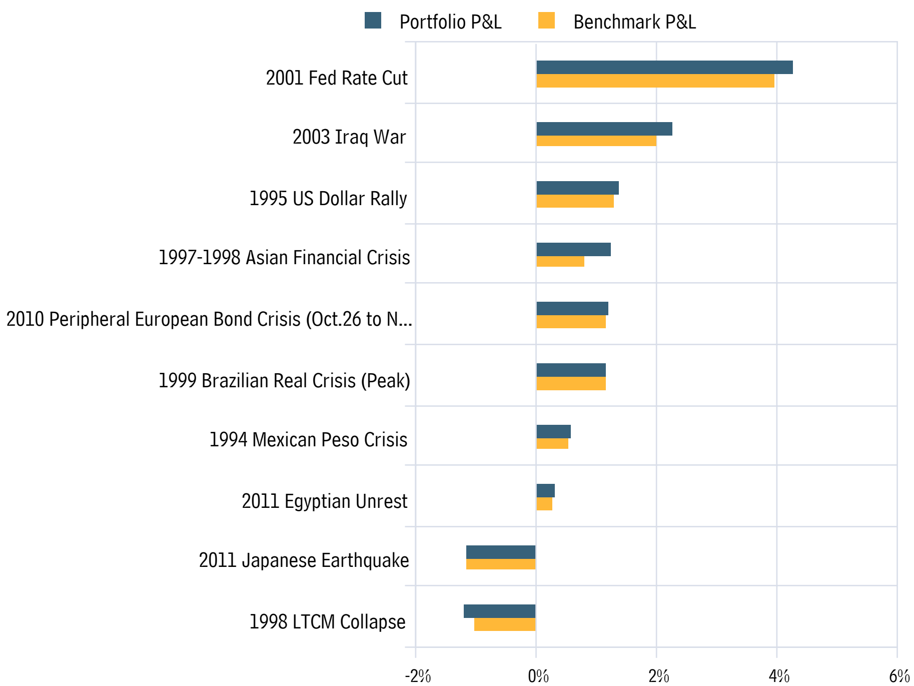
Stress Scenarios

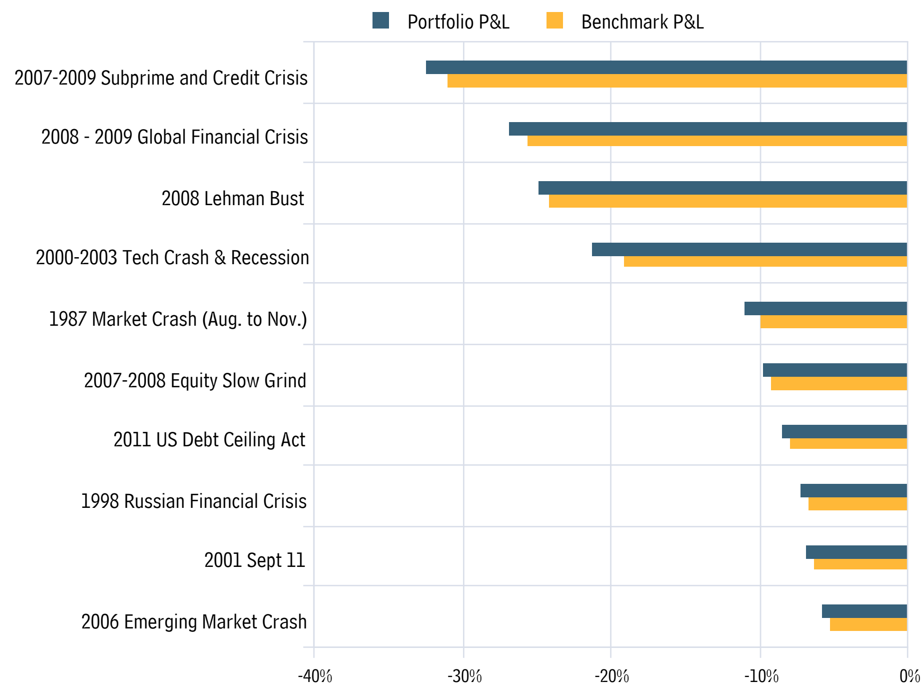
Top 10 Best Scenarios

Scenario	Portfolio P&L	Benchmark P&L	Market Change ($)
2001 Fed Rate Cut	4.25	3.94	785,168,487
2003 Iraq War	2.28	2.00	420,478,868
1995 US Dollar Rally	1.40	1.29	257,877,515
1997-1998 Asian Financial Crisis	1.23	0.79	226,499,634
2010 Peripheral European Bond Crisis (Oc	1.20	1.15	222,209,604
1999 Brazilian Real Crisis (Peak)	1.17	1.14	216,180,423
1994 Mexican Peso Crisis	0.58	0.53	106,563,427
2011 Egyptian Unrest	0.31	0.28	58,183,613
2011 Japanese Earthquake	-1.16	-1.15	-214,481,304
1998 LTCM Collapse	-1.19	-1.01	-220,238,094

Top 10 Worst Scenarios

Scenario	Portfolio P&L	Benchmark P&L	Market Change ($)
2007-2009 Subprime and Credit Crisis	-32.36	-31.01	-5,979,850,051
2008 - 2009 Global Financial Crisis	-26.81	-25.67	-4,953,013,730
2008 Lehman Bust	-24.80	-24.09	-4,582,843,744
2000-2003 Tech Crash & Recession	-21.35	-19.17	-3,944,383,231
1987 Market Crash (Aug. to Nov.)	-10.95	-9.96	-2,023,441,692
2007-2008 Equity Slow Grind	-9.66	-9.23	-1,785,564,618
2011 US Debt Ceiling Act	-8.49	-8.01	-1,568,884,731
1998 Russian Financial Crisis	-7.20	-6.59	-1,330,194,403
2001 Sept 11	-6.81	-6.25	-1,258,692,592
2006 Emerging Market Crash	-5.78	-5.30	-1,067,654,778





BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 6,471
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 8,036,613,401
ACCEPTED: 6,419

Total Plan Summary

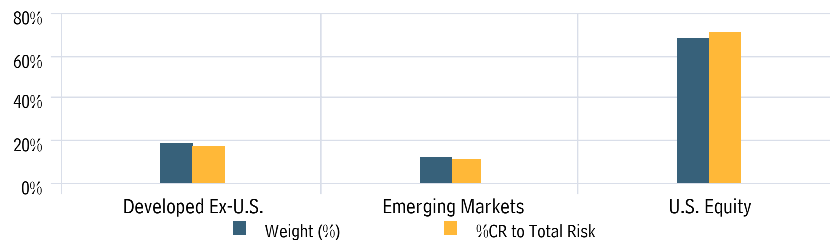
Risk Summary

Statistic	Value
Total Risk	17.50
Benchmark Risk	17.43
Active Risk	0.82
Portfolio Beta	1.00

Asset Class Contribution to Risk

Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total	**8,036,613,401**	**100.00**	**17.50**	**17.50**	**100.00**
Developed Ex-U.S.	1,506,671,179	18.75	18.11	3.16	18.05
Emerging Markets	1,019,107,693	12.68	18.75	1.99	11.39
U.S. Equity	5,510,834,529	68.57	18.29	12.35	70.56

Asset Class Allocation

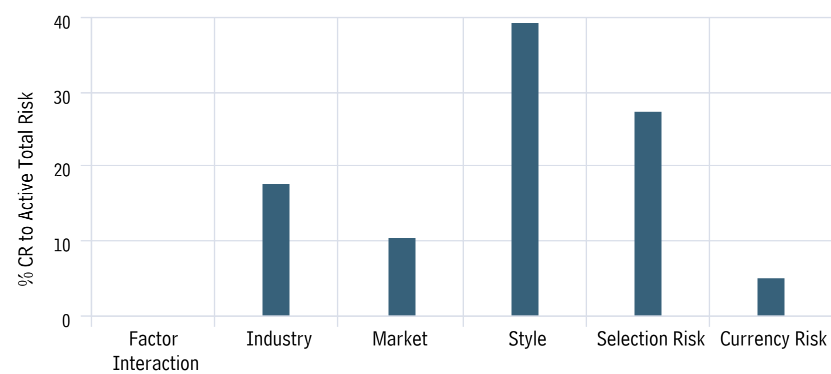


Risk Factor Breakdown

Risk Decomposition

	Portfolio			Active		
Risk Source	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	**17.50**	**100.00**	**1.00**	**0.82**	**100.00**	**1.00**
Local Market Risk	16.61	94.91	1.00	0.77	94.82	0.96
Common Factor Risk	16.52	94.38	0.99	0.55	67.37	0.80
Country	-0.01	-0.03	-0.04	0.00	0.08	0.01
Industry	0.13	0.72	0.15	0.14	17.50	0.47
Market	16.36	93.50	0.99	0.09	10.59	0.24
Style	0.03	0.20	0.07	0.32	39.24	0.63
Selection Risk	0.09	0.53	0.07	0.22	27.45	0.52
Currency Risk	0.89	5.09	0.55	0.04	5.18	0.18

Active Risk from Risk Factors



BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 6,471
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 8,036,613,401
ACCEPTED: 6,419

Portfolio Allocation by Region

	Weight (%)						
Region	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
Total	**100.00**	**100.00**	**-0.00**	**17.50**	**0.82**	**100.00**	**0.01**
Asia Pacific	14.52	17.32	-2.80	17.76	0.14	17.46	-0.02
EMEA	12.60	14.02	-1.42	20.20	0.11	14.03	-0.00
Latin-S America	1.30	1.28	0.02	26.89	0.00	0.13	0.00
N America	71.33	66.95	4.37	18.28	0.55	68.00	0.01
Rest of World	0.26	0.43	-0.17	16.59	0.00	0.38	-0.01

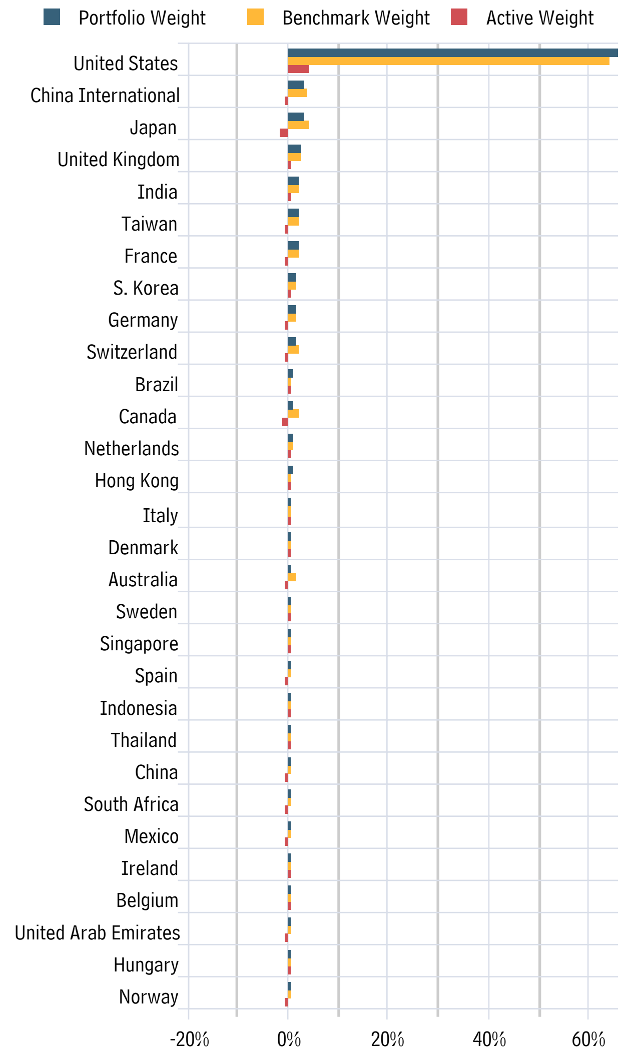
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 6,471
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 8,036,613,401
ACCEPTED: 6,419

Top 30 Countries by Weight%

Country of Exposure	Weight (%) Portfolio	Weight (%) Benchmark	Weight (%) Active	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
Total	**100.00**	**100.00**	**-0.00**	**17.50**	**0.82**	**100.00**	**0.01**
United States	68.44	64.29	4.14	18.30	0.53	65.10	0.02
China International	3.28	3.53	-0.25	30.61	0.02	2.07	-0.02
Japan	2.94	4.30	-1.36	17.92	0.07	8.30	-0.03
United Kingdom	2.92	2.82	0.09	21.63	0.04	4.82	0.01
India	2.11	2.09	0.03	20.41	0.01	1.21	0.01
Taiwan	2.07	2.23	-0.16	26.57	0.00	0.60	-0.01
France	1.91	2.39	-0.47	20.75	0.01	0.90	0.01
S. Korea	1.85	1.76	0.09	25.78	0.01	0.75	-0.01
Germany	1.55	1.65	-0.10	22.89	0.01	1.06	0.01
Switzerland	1.53	1.93	-0.40	17.01	0.02	1.92	-0.00
Brazil	1.26	0.79	0.48	32.60	0.01	1.11	0.03
Canada	1.25	2.27	-1.02	21.77	0.01	1.38	0.01
Netherlands	1.13	0.89	0.24	28.69	0.01	0.72	0.02
Hong Kong	0.94	0.48	0.46	22.38	-0.00	-0.41	-0.01
Italy	0.80	0.51	0.29	22.91	0.00	0.53	0.02
Denmark	0.76	0.59	0.17	21.00	0.00	0.56	0.01
Australia	0.73	1.41	-0.68	24.07	0.01	1.76	0.00
Sweden	0.64	0.62	0.02	28.16	0.01	0.88	0.02
Singapore	0.41	0.23	0.18	16.29	-0.00	-0.31	-0.00
Spain	0.40	0.50	-0.10	21.12	0.00	0.53	0.01
Indonesia	0.38	0.27	0.10	22.83	0.00	0.05	0.01
Thailand	0.35	0.29	0.06	22.83	0.00	0.24	-0.00
China	0.30	0.69	-0.39	34.26	0.01	1.30	-0.01
South Africa	0.26	0.46	-0.20	32.57	0.00	0.49	0.01
Mexico	0.26	0.40	-0.14	25.52	0.00	0.32	0.01
Ireland	0.25	0.19	0.07	28.04	0.00	0.26	0.03
Belgium	0.22	0.18	0.04	20.56	-0.00	-0.20	0.00
United Arab Emirates	0.15	0.19	-0.04	20.98	0.00	0.07	0.01
Hungary	0.12	0.03	0.09	39.81	0.00	0.12	0.02
Norway	0.12	0.13	-0.01	28.16	0.00	0.23	0.01



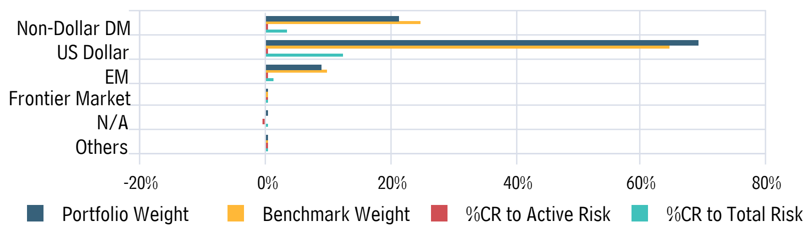
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 6,471
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 8,036,613,401
ACCEPTED: 6,419

Portfolio Allocation by Currency

Exposure by Market



Developed Market Currency

Top Five	Exposure $	CR to AR (%)	CR to TR (%)
US Dollar	5,555,700,142.71	66.00	71.00
Euro	513,237,006.91	4.02	7.00
Hong Kong Dollar	298,393,630.44	2.20	3.12
Japanese Yen	236,371,202.83	8.30	2.12
British Pound Sterling	230,757,710.15	4.90	3.02

Emerging Market Currency

Top Five	Exposure $	CR to AR (%)	CR to TR (%)
Indian Rupee	169,916,623.50	1.21	1.46
New Taiwan Dollar	165,990,888.74	0.60	1.94
Korean Won	143,963,062.83	0.89	1.98
Brazilian Real	101,371,826.38	1.11	1.26
Indonesian Rupiah	30,222,260.32	0.05	0.28

Top 15 Currencies by Weight%

	Weight (%)							
Currency of Exposure	Portfolio	Benchmark	Active	Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
Total	**100.00**	**100.00**	**0.00**	**17.50**	**17.50**	**100.00**	**0.82**	**100.00**
US Dollar	69.13	64.60	4.53	18.28	12.43	71.00	0.54	66.00
Euro	6.39	6.53	-0.14	21.58	1.23	7.00	0.03	4.02
Hong Kong Dollar	3.71	3.82	-0.11	30.49	0.55	3.12	0.02	2.20
Japanese Yen	2.94	4.30	-1.36	17.92	0.37	2.12	0.07	8.30
British Pound Sterling	2.87	2.83	0.05	21.75	0.53	3.02	0.04	4.90
Indian Rupee	2.11	2.09	0.03	20.41	0.26	1.46	0.01	1.21
New Taiwan Dollar	2.07	2.23	-0.16	26.57	0.34	1.94	0.00	0.60
Korean Won	1.79	1.76	0.03	25.73	0.35	1.98	0.01	0.89
Swiss Franc	1.53	1.93	-0.40	17.01	0.21	1.21	0.02	1.92
Brazilian Real	1.26	0.79	0.48	32.60	0.22	1.26	0.01	1.11
Canadian Dollar	1.22	2.24	-1.02	21.54	0.23	1.34	0.01	1.36
Danish Krone	0.76	0.59	0.17	21.00	0.12	0.67	0.00	0.56
Australian Dollar	0.73	1.41	-0.68	24.07	0.15	0.86	0.01	1.76
Singapore Dollar	0.41	0.23	0.18	16.29	0.05	0.28	-0.00	-0.31
Swedish Krona	0.40	0.62	-0.22	27.82	0.09	0.53	0.00	0.06

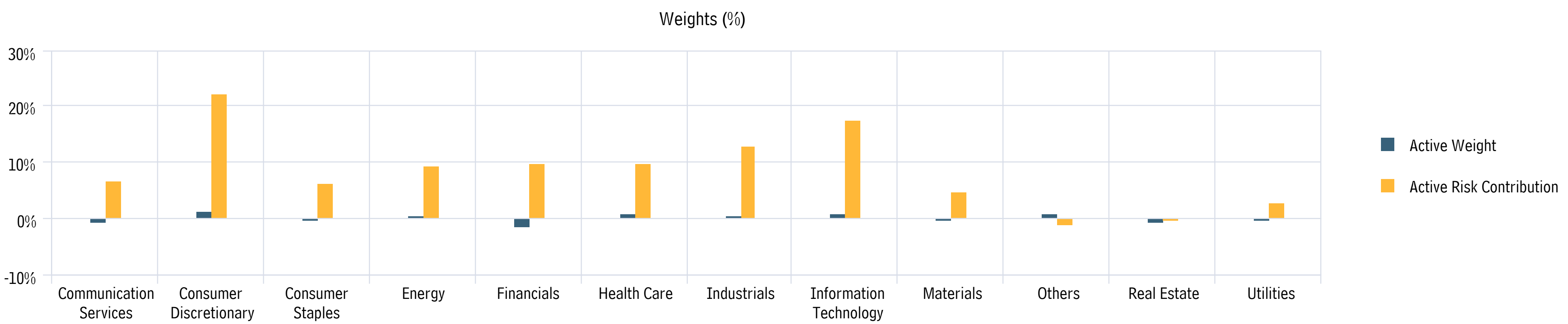
BarraOne Equity Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Equity
BENCHMARK: Public Equity
POSITIONS: 6,471
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 8,036,613,401
ACCEPTED: 6,419

Portfolio Allocation by GICS Sector

	Weight (%)						
GICS Sector	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
Total	**100.00**	**100.00**	**-0.00**	**17.50**	**0.82**	**100.00**	**0.01**
Communication Services	6.63	7.27	-0.64	23.02	0.05	6.48	0.01
Consumer Discretionary	12.46	11.38	1.08	23.10	0.18	22.21	0.03
Consumer Staples	6.88	6.89	-0.02	12.26	0.05	6.23	0.01
Energy	4.69	4.56	0.12	26.85	0.08	9.49	0.04
Financials	14.07	15.79	-1.71	19.76	0.08	9.56	0.03
Health Care	12.39	11.77	0.62	14.50	0.08	9.82	0.02
Industrials	11.28	10.70	0.58	19.47	0.11	12.95	0.03
Information Technology	22.36	21.73	0.64	22.41	0.14	17.31	-0.01
Materials	4.08	4.61	-0.53	20.91	0.04	4.52	0.02
Others	0.79	0.00	0.79	0.66	-0.01	-1.22	-0.00
Real Estate	1.97	2.58	-0.60	20.85	-0.00	-0.09	0.02
Utilities	2.40	2.73	-0.33	17.65	0.02	2.73	0.01



BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 8,058
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 5,416,039,279
ACCEPTED: 7,965

Total Plan Summary

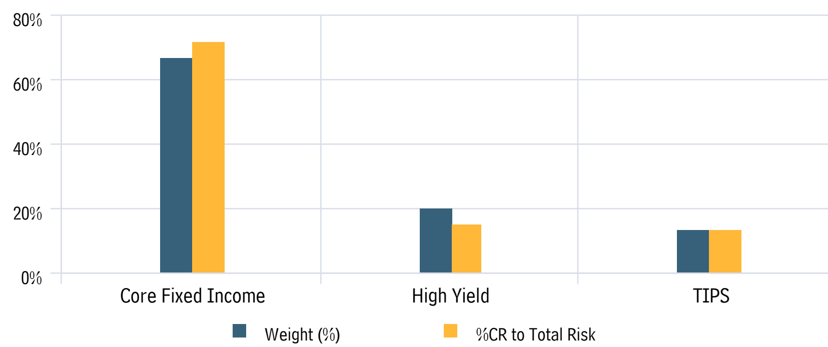
Risk Summary

Statistic	Value
Total Risk	5.32
Benchmark Risk	5.37
Active Risk	0.16
Portfolio Beta	0.99
Cont. to Eff. Duration	5.81
Convexity	0.65
Yield to Worst (%)	4.89
OAS to Swap (bp)	95.77

Asset Class Contribution to Risk

Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total	**5,416,039,279**	**100.00**	**5.32**	**5.32**	**100.00**
Core Fixed Income	3,623,500,162	66.90	5.91	3.80	71.45
High Yield	1,067,877,923	19.72	6.40	0.79	14.91
TIPS	724,661,194	13.38	6.40	0.73	13.64

Asset Class Allocation

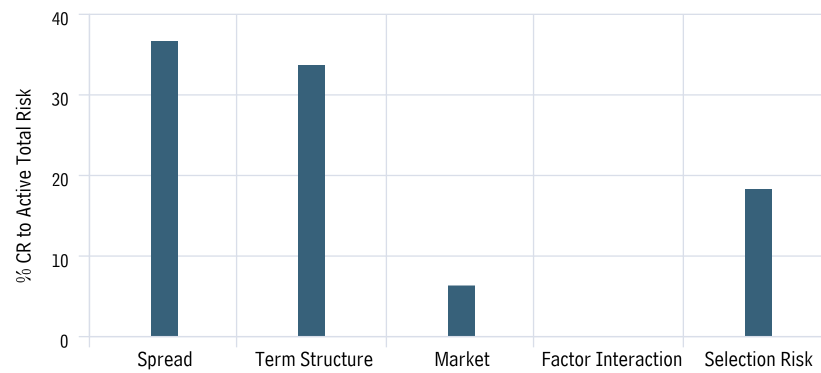


Risk Factor Breakdown

Risk Decomposition

Risk Source	Portfolio Risk Contribution	Portfolio % Risk	Portfolio Correlation	Active Risk Contribution	Active % Risk	Active Correlation
Total Risk	**5.32**	**100.00**	**1.00**	**0.16**	**100.00**	**1.00**
Local Market Risk	5.32	100.00	1.00	0.16	99.97	1.00
Common Factor Risk	5.32	99.97	1.00	0.13	81.47	0.90
Implied Volatility	0.05	1.00	0.48	0.00	0.68	0.25
Inflation	-0.04	-0.71	-0.06	0.00	2.33	0.23
Market	0.01	0.13	0.28	0.01	6.21	0.38
Spread	0.31	5.79	0.17	0.06	36.64	0.68
Term Structure	4.99	93.77	0.91	0.05	33.79	0.64
Selection Risk	0.00	0.02	0.02	0.03	18.50	0.43

Active Risk from Risk Factors



BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 8,058
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 5,416,039,279
ACCEPTED: 7,965

Portfolio by Factor Breakdowns

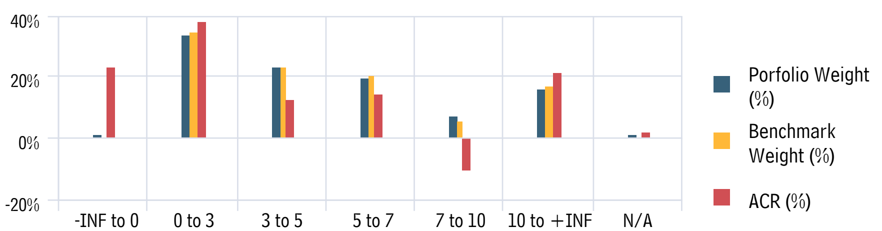
Top 10 Spread Factor

		Exposure (Residual)				Correlation	Contribution (Residual)		
Spread Factor	Volatility	Portfolio	Benchmark	Active	MCAR	Active Port	to TR	to AR	to AR%
US Bank Loan Consumer Discreti	24.57	0.11	0.00	0.11	0.15	0.61	0.00	0.02	10.17
US Bank Loan Financials Spread	26.26	0.06	0.00	0.06	0.16	0.62	0.00	0.01	6.54
US Financials - Banking IG Spr	51.65	0.14	0.10	0.04	0.25	0.48	0.01	0.01	5.75
US Bank Loan Health Care Sprea	25.17	0.06	0.00	0.06	0.14	0.56	0.00	0.01	5.57
US ABS Miscellaneous Spread	31.20	0.05	0.00	0.04	0.18	0.58	-0.00	0.01	5.22
US Consumer Discretionary HY S	51.36	0.85	0.82	0.03	0.25	0.48	0.05	0.01	4.59
US Corporate HY Spread	44.30	0.03	0.00	0.03	0.23	0.52	0.00	0.01	4.45
US ABS Home Equity Spread	29.68	0.04	0.00	0.04	0.15	0.51	-0.00	0.01	4.07
US Health Care HY Spread	45.72	0.22	0.19	0.03	0.21	0.46	0.01	0.01	3.64
US Financials - Capital Market	48.13	0.07	0.05	0.02	0.23	0.47	0.01	0.01	3.38

Top 10 Term Structure

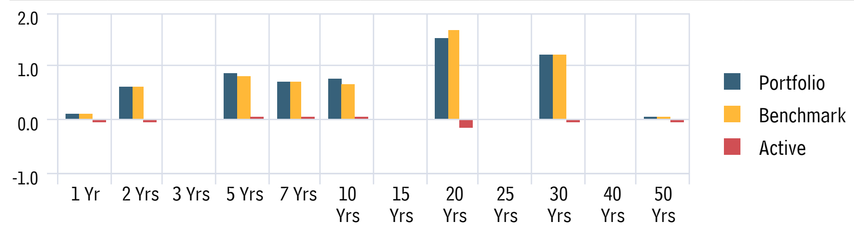
		Exposure (Residual)				Correlation	Contribution (Residual)		
Term Structure	Volatility	Portfolio	Benchmark	Active	MCAR	Active Port	to TR	to AR	to AR%
USD Rate 20Y	0.89	1.52	1.68	-0.16	-0.00	-0.56	1.17	0.08	51.66
USD Rate 2Y	1.27	0.59	0.63	-0.04	-0.01	-0.42	0.55	0.02	12.61
USD Rate 30Y	0.85	1.22	1.24	-0.02	-0.00	-0.52	0.89	0.01	5.05
USD Rate 1Y	1.22	0.11	0.12	-0.01	-0.00	-0.40	0.09	0.00	2.50
USD Rate 50Y	0.85	0.02	0.02	-0.00	-0.00	-0.52	0.01	0.00	0.11
USD Muni Rates 1Y	1.13	0.00	0.00	0.00	-0.00	-0.09	0.00	-0.00	-0.01
USD Muni Rates 2Y	1.18	0.00	0.00	0.00	-0.00	-0.08	0.00	-0.00	-0.02
USD Muni Rates 5Y	1.12	0.00	0.00	0.00	-0.00	-0.03	0.00	-0.00	-0.03
USD Muni Rates 10Y	1.06	0.00	0.00	0.00	-0.00	-0.08	0.00	-0.00	-0.23
USD Muni Rates 20Y	1.04	0.01	0.00	0.01	-0.00	-0.07	0.00	-0.00	-0.30

%CR to Active Risk by Duration Buckets



Key Rate Duration

		Key Rate Duration										
	Cont. To Eff. Dur	1 Yr	2 Yrs	5 Yrs	7 Yrs	10 Yrs	15 Yrs	20 Yrs	25 Yrs	30 Yrs	40 Yrs	50 Yrs
Portfolio	5.81	0.11	0.59	0.86	0.73	0.74	0.00	1.52	0.00	1.23	0.00	0.02
Benchmark	5.90	0.12	0.63	0.84	0.70	0.68	0.00	1.68	0.00	1.24	0.00	0.02
Active	-0.09	-0.01	-0.04	0.02	0.03	0.06	0.00	-0.16	0.00	-0.02	0.00	-0.00

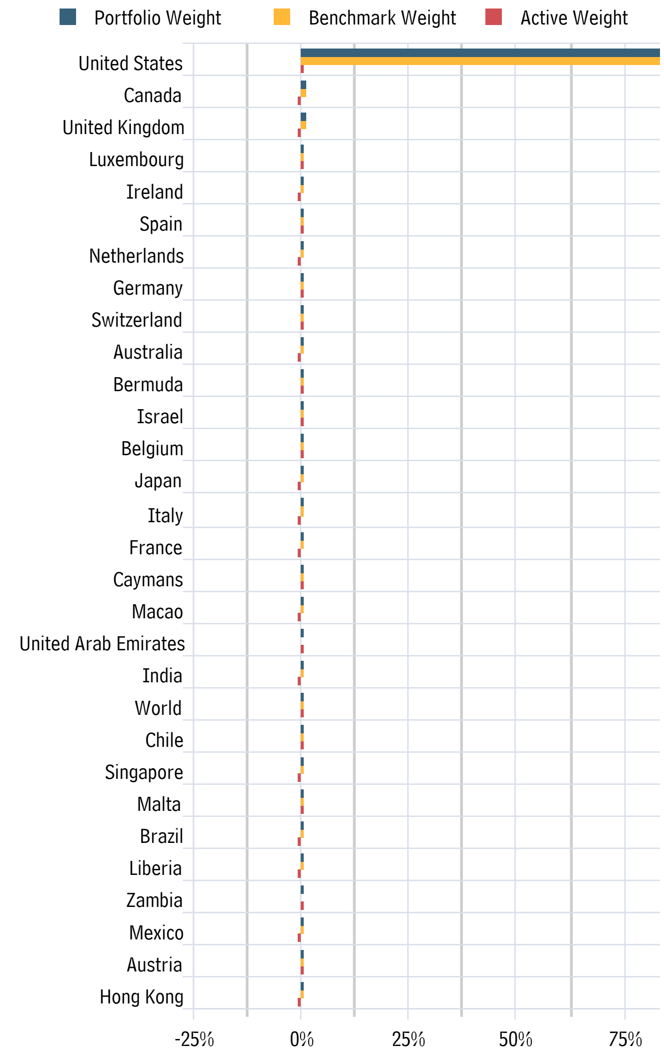


BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 8,058
MODEL: MAC.L
CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 5,416,039,279
ACCEPTED: 7,965

Top 30 Countries by Weight%

	Weight (%)						
Country of Exposure	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
Total	**100.00**	**100.00**	**0.00**	**5.32**	**0.16**	**100.00**	**0.00**
United States	95.04	94.42	0.63	5.36	0.15	98.78	-0.01
Canada	1.16	1.32	-0.15	4.92	-0.00	-1.77	-0.00
United Kingdom	1.07	1.09	-0.02	5.43	0.01	3.38	-0.01
Luxembourg	0.43	0.32	0.10	10.34	0.00	2.42	0.01
Ireland	0.38	0.42	-0.04	6.59	0.00	0.05	0.00
Spain	0.16	0.09	0.07	5.66	0.00	0.72	-0.01
Netherlands	0.15	0.21	-0.06	8.94	-0.00	-0.90	0.01
Germany	0.15	0.10	0.05	6.94	0.00	0.95	0.00
Switzerland	0.15	0.12	0.02	5.48	0.00	0.16	-0.01
Australia	0.13	0.17	-0.05	7.66	0.00	0.01	-0.00
Bermuda	0.13	0.11	0.02	5.00	-0.00	-0.68	0.01
Israel	0.12	0.01	0.11	6.64	0.00	1.43	0.00
Belgium	0.12	0.11	0.01	12.16	-0.00	-0.36	-0.03
Japan	0.10	0.33	-0.23	4.84	-0.00	-0.15	-0.02
Italy	0.09	0.22	-0.13	6.18	-0.00	-2.55	0.01
France	0.07	0.11	-0.04	11.12	0.00	0.47	0.01
Caymans	0.07	0.07	0.00	5.90	-0.00	-0.26	0.02
Macao	0.06	0.20	-0.14	8.09	-0.00	-1.69	0.01
United Arab Emirates	0.05	0.00	0.05	3.82	0.00	0.83	0.01
India	0.05	0.05	-0.00	5.73	0.00	0.01	0.01
World	0.04	0.00	0.04	3.70	0.00	0.09	-0.01
Chile	0.04	0.01	0.03	6.74	0.00	0.94	0.02
Singapore	0.04	0.07	-0.03	28.83	-0.00	-0.62	-0.02
Malta	0.03	0.03	0.00	37.57	0.00	0.32	0.10
Brazil	0.02	0.04	-0.02	12.88	-0.00	-0.53	0.04
Liberia	0.02	0.05	-0.03	3.78	-0.00	-0.33	0.00
Zambia	0.02	0.00	0.02	4.45	0.00	0.26	0.01
Mexico	0.02	0.03	-0.02	5.28	0.00	0.35	-0.02
Austria	0.02	0.01	0.00	10.10	0.00	0.03	0.02
Hong Kong	0.02	0.10	-0.08	17.09	-0.00	-0.39	-0.01



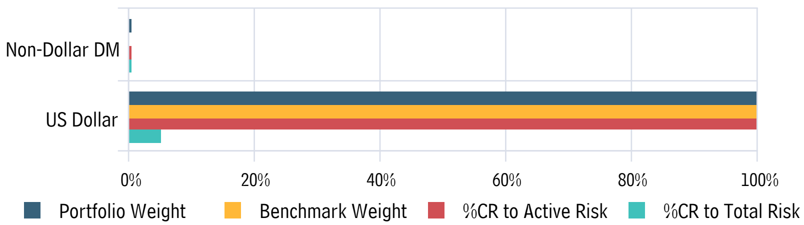
BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 8,058
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 5,416,039,279
ACCEPTED: 7,965

Portfolio Allocation by Currency

Exposure by Market



Developed Market Currency

Top Five	Exposure $	CR to AR (%)	CR to TR (%)
US Dollar	5,415,969,538.45	99.82	100.00
Canadian Dollar	68,597.90	0.18	0.00
Euro	1,142.43	0.00	0.00

Emerging Market Currency

Top Five	Exposure $	CR to AR (%)	CR to TR (%)

Top 15 Currencies by Weight%

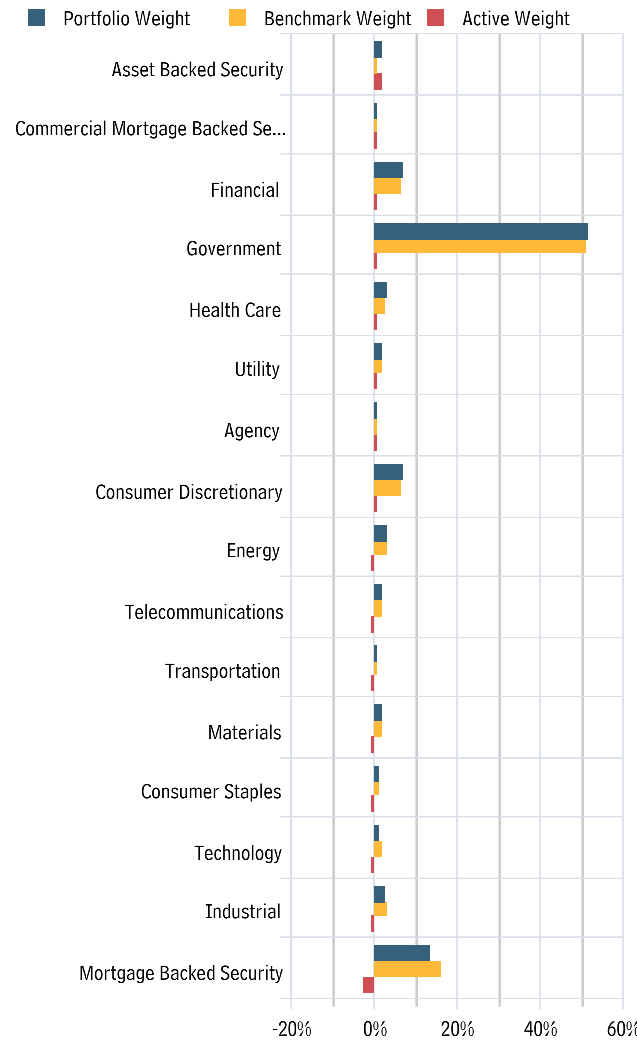
	Weight (%)							
Currency of Exposure	Portfolio	Benchmark	Active	Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
Total	**100.00**	**100.00**	**-0.00**	**5.32**	**5.32**	**100.00**	**0.16**	**100.00**
US Dollar	100.00	100.00	-0.00	5.32	5.32	100.00	0.16	99.82
Canadian Dollar	0.00	0.00	0.00	64.92	0.00	0.00	0.00	0.18
Euro	0.00	0.00	0.00	7.34	0.00	0.00	0.00	0.00

BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 8,058
MODEL: MAC.L
CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 5,416,039,279
ACCEPTED: 7,965

Portfolio Allocation by Bond Sector

Sector	Weight (%) Portfolio	Benchmark	Active	Cont. To Eff. Dur	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
Total	**100.00**	**100.00**	**0.00**	**5.81**	**5.32**	**0.16**	**100.00**	**0.00**
Government	51.53	51.13	0.39	3.35	5.61	0.01	6.86	-0.02
Mortgage Backed Security	13.34	16.13	-2.79	0.79	6.56	0.04	24.21	-0.03
Financial	6.81	6.37	0.43	0.30	5.51	0.03	20.57	0.00
Consumer Discretionary	6.79	6.72	0.08	0.29	7.73	0.03	19.67	0.01
Health Care	3.21	2.89	0.32	0.20	7.31	0.01	9.31	-0.00
Energy	3.10	3.11	-0.01	0.13	5.79	0.01	8.07	0.01
Industrial	2.62	3.18	-0.56	0.11	6.22	-0.01	-6.10	0.01
Utility	1.92	1.62	0.30	0.11	6.41	0.02	11.01	-0.01
Telecommunications	1.81	1.84	-0.04	0.11	8.14	-0.01	-5.01	0.00
Materials	1.71	1.93	-0.21	0.06	5.40	-0.00	-1.25	0.01
Asset Backed Security	1.70	0.00	1.70	0.06	3.83	0.01	8.00	-0.01
Technology	1.51	2.06	-0.54	0.09	7.16	-0.00	-2.92	-0.01
Consumer Staples	1.10	1.59	-0.49	0.07	6.77	-0.01	-5.08	-0.01
Transportation	0.80	0.91	-0.11	0.03	5.25	0.00	1.27	-0.00
Agency	0.67	0.48	0.19	0.03	4.92	-0.00	-1.92	-0.01
Commercial Mortgage Backed	0.61	0.00	0.61	0.01	2.71	0.01	5.01	-0.00
Others	0.45	0.00	0.45	0.01	3.90	0.01	7.02	0.00
Local/Provincial	0.27	0.05	0.22	0.02	5.30	0.00	1.19	-0.01
Supranational	0.04	0.00	0.04	0.00	3.70	0.00	0.09	-0.01



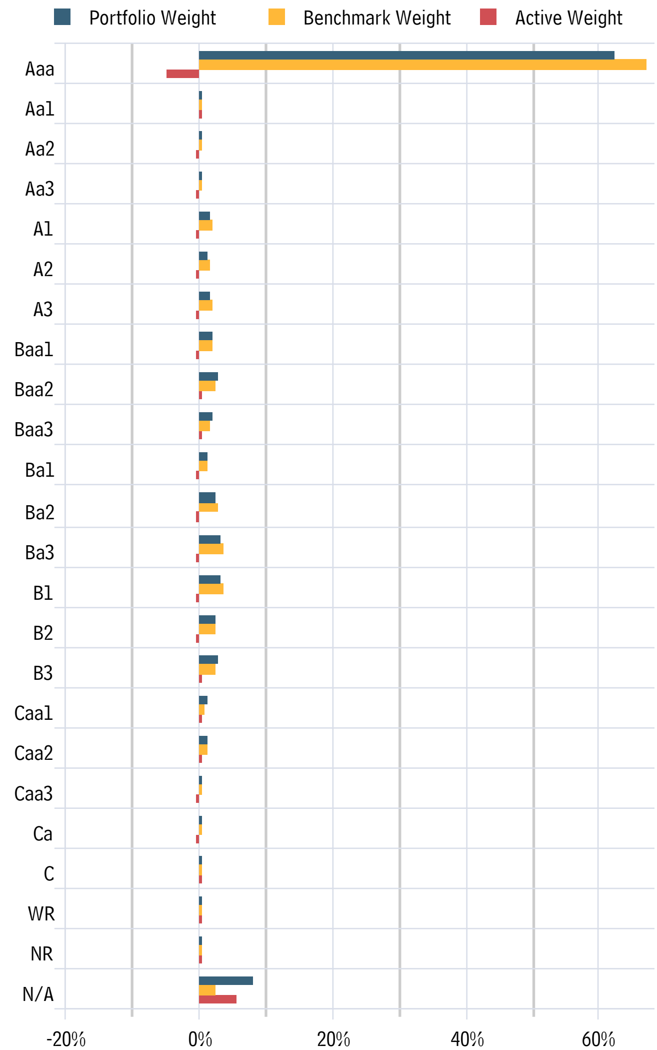
BarraOne Fixed Income Summary

COMPANY: NYCRS - Fire Plan
PORTFOLIO: Public Fixed Income
BENCHMARK: Public Fixed Income
POSITIONS: 8,058
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 5,416,039,279
ACCEPTED: 7,965

Portfolio Allocation by Moody's Rating

	Weight (%)							
Rating	Portfolio	Benchmark	Active	Cont. To Eff. Dur	Spread Duration	Total Risk	Active Risk CR	%CR to Active TR
Total	**100.00**	**100.00**	**0.00**	**5.81**	**6.04**	**5.32**	**0.16**	**100.00**
Aaa	62.31	67.05	-4.74	4.01	6.64	5.77	0.07	47.62
Aa1	0.01	0.01	0.00	0.00	2.19	2.50	0.00	0.36
Aa2	0.10	0.35	-0.25	0.01	11.26	9.28	0.00	2.39
Aa3	0.19	0.36	-0.17	0.02	10.00	9.05	0.00	0.83
A1	1.63	2.08	-0.44	0.12	7.67	7.20	0.00	2.12
A2	1.03	1.60	-0.57	0.07	7.03	6.64	0.01	4.53
A3	1.81	1.95	-0.14	0.13	7.65	7.23	0.00	2.07
Baa1	1.98	2.08	-0.10	0.15	8.06	7.73	0.00	2.42
Baa2	2.94	2.53	0.40	0.21	7.47	7.32	0.00	2.91
Baa3	2.20	1.61	0.59	0.12	5.45	5.86	0.01	3.69
Ba1	1.38	1.40	-0.02	0.07	5.23	5.90	0.00	1.74
Ba2	2.27	2.61	-0.35	0.09	4.39	5.90	-0.00	-2.07
Ba3	3.08	3.52	-0.44	0.11	3.84	5.24	-0.01	-3.90
B1	3.11	3.46	-0.35	0.11	3.75	5.98	-0.01	-5.63
B2	2.35	2.39	-0.04	0.07	3.27	6.12	0.01	3.43
B3	2.67	2.30	0.38	0.08	3.09	7.31	0.02	15.04
Caa1	1.14	0.90	0.24	0.03	2.84	10.28	0.01	9.18
Caa2	1.33	1.03	0.30	0.04	3.21	10.88	0.02	10.16
Caa3	0.09	0.15	-0.06	0.00	3.53	18.45	-0.01	-4.51
Ca	0.05	0.16	-0.10	0.00	2.46	15.22	-0.01	-6.91
C	0.02	0.01	0.01	0.00	3.34	23.43	0.00	0.46
WR	0.12	0.08	0.05	0.00	3.46	9.32	0.00	2.60
NR	0.01	0.00	0.01	0.00	3.47	4.49	0.00	0.06
Not Rated	8.19	2.37	5.81	0.37	4.77	4.43	0.02	11.43



BarraOne Equity Summary

COMPANY: NYCRS - FIRE
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 455
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 4,847,366,978
ACCEPTED: 453

Total Plan Summary

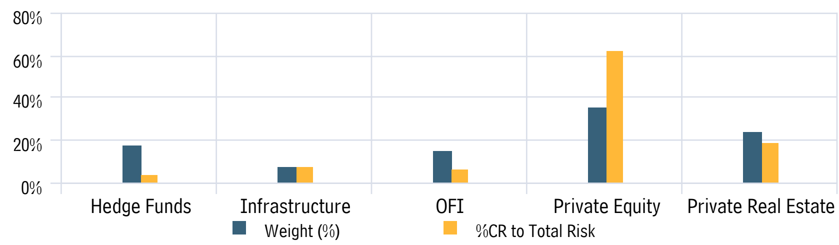
Risk Summary

Statistic	Value
Total Risk	13.75
Benchmark Risk	10.66
Active Risk	6.55
Portfolio Beta	1.14

Asset Class Contribution to Risk

Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total	**4,847,366,978**	**100.00**	**13.75**	**13.75**	**100.00**
Hedge Funds	851,936,553	17.58	5.48	0.55	3.97
Infrastructure	370,511,789	7.64	15.69	1.09	7.93
OFI	737,279,917	15.21	7.64	0.92	6.69
Private Equity	1,731,115,047	35.71	24.76	8.56	62.31
Private Real Estate	1,156,523,672	23.86	14.46	2.63	19.11

Asset Class Allocation

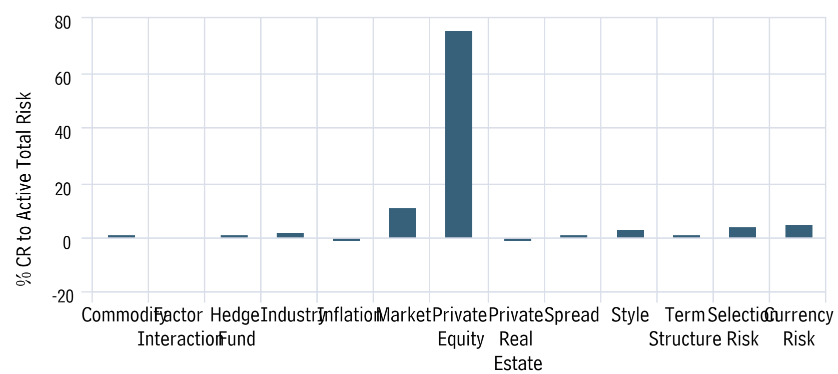


Risk Factor Breakdown

Risk Decomposition

	Portfolio			Active		
Risk Source	Risk Contribution	% Risk	Correlation	Risk Contribution	% Risk	Correlation
Total Risk	**13.75**	**100.00**	**1.00**	**6.55**	**100.00**	**1.00**
Local Market Risk	13.12	95.46	1.00	6.23	95.18	0.99
Common Factor Risk	13.06	95.05	0.99	5.96	91.03	0.96
Hedge Fund	0.02	0.12	0.04	0.01	0.23	0.05
Private Real Estate	2.33	16.96	0.72	-0.04	-0.68	-0.03
Commodity	0.01	0.07	0.07	0.01	0.11	0.05
Industry	0.14	1.02	0.20	0.11	1.64	0.16
Inflation	-0.00	-0.00	0.00	-0.03	-0.52	-0.11
Market	7.39	53.74	0.88	0.72	11.01	0.34
Private Equity	2.36	17.16	0.41	4.95	75.64	0.87
Spread	0.53	3.89	0.64	0.05	0.82	0.23
Style	0.26	1.90	0.40	0.18	2.77	0.26
Term Structure	0.03	0.23	0.05	0.01	0.10	0.03
Selection Risk	0.06	0.41	0.06	0.27	4.15	0.20
Currency Risk	0.62	4.54	0.48	0.32	4.82	0.29

Active Risk from Risk Factors



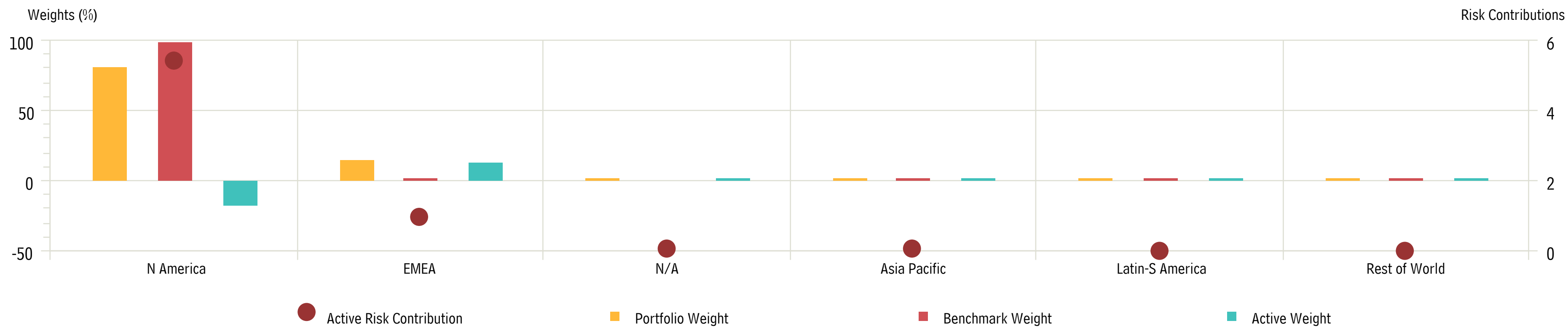
BarraOne Equity Summary

COMPANY: NYCRS - FIRE
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 455
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 4,847,366,978
ACCEPTED: 453

Portfolio Allocation by Region

	Weight (%)						
Region	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
Total	**100.00**	**100.00**	**-0.00**	**13.75**	**6.55**	**100.00**	**0.07**
Asia Pacific	2.07	0.12	1.95	14.04	0.04	0.63	0.02
EMEA	13.93	1.21	12.73	19.01	0.99	15.14	0.06
Latin-S America	0.41	0.01	0.41	26.45	0.02	0.23	0.04
N America	81.11	98.52	-17.41	13.84	5.42	82.74	0.02
N/A	2.25	0.00	2.25	21.42	0.08	1.19	0.03
Rest of World	0.22	0.15	0.07	11.33	0.00	0.07	0.00



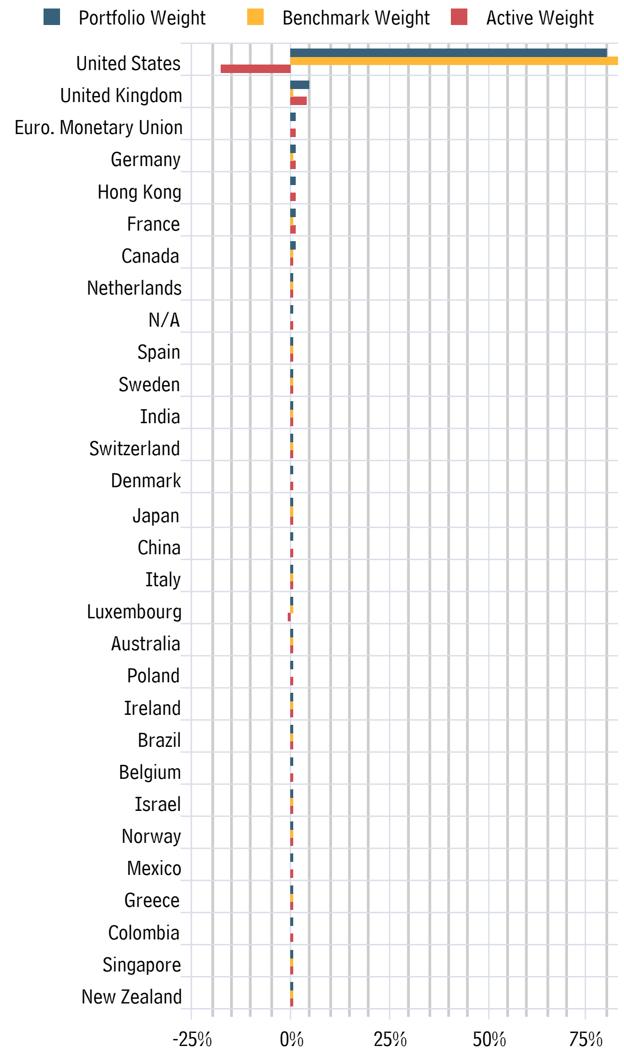
BarraOne Equity Summary

COMPANY: NYCRS - FIRE
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 455
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 4,847,366,978
ACCEPTED: 453

Top 30 Countries by Weight%

Country of Exposure	Weight (%) Portfolio	Benchmark	Active	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
Total	**100.00**	**100.00**	**-0.00**	**13.75**	**6.55**	**100.00**	**0.07**
United States	80.01	98.00	-17.99	13.83	5.31	81.10	0.05
United Kingdom	4.59	0.28	4.31	18.25	0.30	4.53	0.08
Euro. Monetary Union	1.60	0.00	1.60	25.62	0.11	1.64	0.09
Germany	1.45	0.09	1.36	19.44	0.09	1.34	0.08
Hong Kong	1.43	0.00	1.43	28.12	0.04	0.68	0.06
France	1.08	0.05	1.04	21.51	0.09	1.33	0.10
Canada	1.05	0.49	0.55	16.86	0.11	1.64	0.08
Netherlands	0.93	0.13	0.80	19.79	0.05	0.72	0.07
N/A	0.82	0.00	0.82	17.39	0.03	0.51	0.07
Spain	0.73	0.01	0.72	22.37	0.07	1.05	0.11
Sweden	0.70	0.01	0.69	29.03	0.08	1.17	0.13
India	0.65	0.01	0.64	21.11	0.02	0.26	0.05
Switzerland	0.58	0.03	0.54	29.61	0.06	0.96	0.13
Denmark	0.47	0.00	0.47	27.23	0.04	0.65	0.12
Japan	0.44	0.01	0.43	12.82	0.00	0.01	0.03
China	0.42	0.00	0.42	16.43	0.01	0.08	0.04
Italy	0.33	0.11	0.22	26.41	0.03	0.48	0.08
Luxembourg	0.28	0.34	-0.06	5.94	0.00	0.02	0.01
Australia	0.28	0.05	0.23	19.70	0.01	0.15	0.05
Poland	0.24	0.00	0.24	31.62	0.02	0.37	0.13
Ireland	0.22	0.14	0.08	10.83	0.00	0.05	0.03
Brazil	0.22	0.01	0.21	42.48	0.01	0.18	0.08
Belgium	0.17	0.00	0.17	29.58	0.01	0.17	0.09
Israel	0.17	0.00	0.16	27.45	0.01	0.18	0.09
Norway	0.12	0.01	0.11	24.70	0.01	0.16	0.11
Mexico	0.11	0.00	0.11	13.26	0.00	0.02	0.04
Greece	0.10	0.00	0.10	32.30	0.01	0.16	0.13
Colombia	0.08	0.00	0.08	30.37	0.00	0.04	0.06
Singapore	0.07	0.01	0.07	16.20	0.00	0.03	0.04
New Zealand	0.07	0.01	0.06	23.29	0.00	0.04	0.05



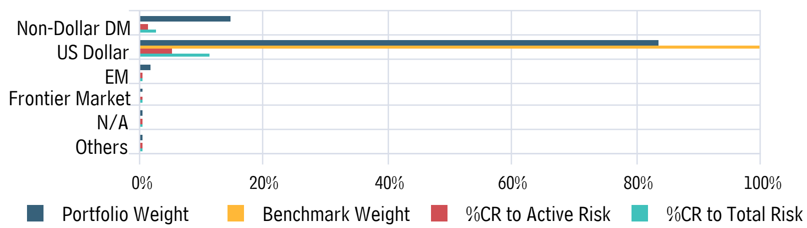
BarraOne Equity Summary

COMPANY: NYCRS - FIRE
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 455
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 4,847,366,978
ACCEPTED: 453

Portfolio Allocation by Currency

Exposure by Market



Developed Market Currency

Top Five	Exposure $	CR to AR (%)	CR to TR (%)
US Dollar	4,051,560,840.10	81.92	81.15
Euro	359,567,392.62	7.70	8.44
British Pound Sterling	173,655,788.52	4.67	4.44
Canadian Dollar	38,544,155.11	1.59	1.13
Swedish Krona	33,504,701.85	1.17	1.09

Emerging Market Currency

Top Five	Exposure $	CR to AR (%)	CR to TR (%)
Indian Rupee	31,188,603.92	0.26	0.51
Chinese Yuan	19,197,835.15	0.08	0.23
Polish Zloty	11,435,824.82	0.37	0.31
Brazilian Real	10,095,007.01	0.18	0.25
Korean Won	2,967,997.36	0.03	0.05

Top 15 Currencies by Weight%

	Weight (%)							
Currency of Exposure	Portfolio	Benchmark	Active	Total Risk	CR to TR	CR to TR (%)	CR to AR	CR to AR (%)
Total	**100.00**	**100.00**	**-0.00**	**13.75**	**13.75**	**100.00**	**6.55**	**100.00**
US Dollar	83.58	100.00	-16.42	13.50	11.15	81.15	5.36	81.92
Euro	7.42	0.00	7.42	19.45	1.16	8.44	0.50	7.70
British Pound Sterling	3.58	0.00	3.58	22.57	0.61	4.44	0.31	4.67
Canadian Dollar	0.80	0.00	0.80	21.66	0.16	1.13	0.10	1.59
Swedish Krona	0.69	0.00	0.69	29.27	0.15	1.09	0.08	1.17
Indian Rupee	0.64	0.00	0.64	21.23	0.07	0.51	0.02	0.26
Swiss Franc	0.56	0.00	0.56	23.06	0.08	0.61	0.04	0.68
Danish Krone	0.47	0.00	0.47	27.36	0.08	0.62	0.04	0.65
Japanese Yen	0.44	0.00	0.44	12.82	0.02	0.17	0.00	0.01
Chinese Yuan	0.40	0.00	0.40	17.29	0.03	0.23	0.01	0.08
Australian Dollar	0.27	0.00	0.27	20.18	0.04	0.29	0.01	0.14
Polish Zloty	0.24	0.00	0.24	31.62	0.04	0.31	0.02	0.37
Brazilian Real	0.21	0.00	0.21	44.07	0.03	0.25	0.01	0.18
New Israeli Sheqel	0.15	0.00	0.15	29.77	0.03	0.23	0.01	0.17
Norwegian Krone	0.10	0.00	0.10	30.80	0.02	0.17	0.01	0.17

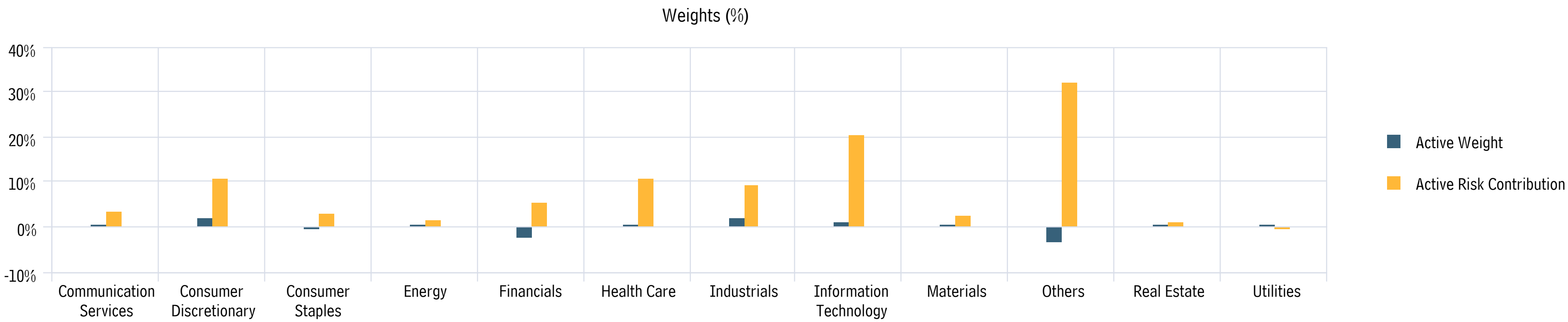
BarraOne Equity Summary

COMPANY: NYCRS - FIRE
PORTFOLIO: Alternative Investments
BENCHMARK: Alternative Investments
POSITIONS: 455
MODEL: MAC.L

CURRENCY: USD
ANALYSIS DATE: June 30, 2023
MARKET VALUE: 4,847,366,978
ACCEPTED: 453

Portfolio Allocation by GICS Sector

	Weight (%)						
GICS Sector	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	%CR to Active TR	MC to Active TR
Total	**100.00**	**100.00**	**-0.00**	**13.75**	**6.55**	**100.00**	**0.07**
Communication Services	3.29	3.23	0.06	19.83	0.24	3.62	0.09
Consumer Discretionary	6.06	4.16	1.90	25.33	0.70	10.70	0.12
Consumer Staples	1.44	2.12	-0.69	20.95	0.20	3.09	0.07
Energy	2.06	2.00	0.06	25.06	0.10	1.54	0.07
Financials	1.69	4.17	-2.48	45.81	0.36	5.44	0.07
Health Care	5.09	4.48	0.62	22.50	0.70	10.76	0.10
Industrials	5.70	3.63	2.06	20.17	0.61	9.32	0.11
Information Technology	8.85	8.06	0.80	28.94	1.33	20.32	0.13
Materials	1.37	1.15	0.23	25.19	0.16	2.48	0.12
Others	61.56	65.06	-3.51	9.50	2.10	32.04	0.02
Real Estate	1.65	1.03	0.62	11.76	0.06	0.85	0.07
Utilities	1.22	0.89	0.33	8.35	-0.01	-0.15	0.02



APPENDICES:

-Basket Clause

-Liquidity Analysis

BASKET CLAUSE ANALYSIS

Basket Limit	**35.00%**
Basket Consumed	**21.88%**
Remaining Capacity	**13.12%**

		Basket-Eligible Assets*			
	Non-Basket Assets	Non-Contributing	Contributing	Basket Assets	Total
FIXED INCOME	**31.51%**	**3.89%**	**0.00%**	**5.20%**	**40.61%**
U.S. Fixed	**15.48%**	**3.63%**	**0.00%**	**4.76%**	**23.87%**
Cash/Equivalent	10.62%	---	---	0.00%	10.62%
TIPS	3.49%	---	---	----	3.49%
Convertible Bonds	---	---	---	----	----
OFI	0.04%	0.12%	0.00%	3.48%	3.63%
High Yield	0.49%	3.48%	0.00%	1.26%	5.23%
Bank Loans	0.00%	---	---	0.00%	0.00%
ETI Investments	0.51%	---	---	0.01%	0.51%
Core/Core Plus	0.33%	0.03%	---	0.01%	0.37%
U.S. Structured	**16.03%**	**0.26%**	**---**	**0.45%**	**16.74%**
Credit	2.73%	0.26%	---	0.25%	3.24%
Mortgages	3.57%	---	---	0.20%	3.77%
ST Treasury	2.76%	---	---	----	2.76%
Treasury/Agency	0.10%	---	---	----	0.10%
MT Treasury	4.47%	---	---	----	4.47%
LT Treasury	2.41%	---	---	----	2.41%
EQUITY	**25.27%**	**17.45%**	**3.77%**	**12.90%**	**59.39%**
Public Equity	**25.25%**	**9.99%**	**3.77%**	**0.02%**	**39.04%**
U.S. Equity	23.67%	0.94%	0.35%	0.00%	24.96%
EAFE	0.16%	5.15%	1.94%	0.01%	7.26%
Emerging Markets	0.24%	3.38%	1.27%	0.01%	4.90%
Global	1.18%	0.53%	0.20%	0.00%	1.92%
Real Estate Equity	---	---	---	----	----
Alternative Investments	**0.01%**	**7.46%**	**---**	**12.88%**	**20.36%**
Hedge Funds	0.00%	---	---	4.53%	4.53%
Infrastructure	0.01%	1.78%	---	0.00%	1.79%
Private RE/Core	0.00%	3.55%	---	----	3.56%
Private RE/Non-Core	0.00%	2.12%	---	0.00%	2.12%
Private Equity	0.00%	---	---	8.36%	8.36%
TOTAL ASSETS	**56.78%**	**21.34%**	**3.78%**	**18.10%**	**100.00%**
	Non-Basket:	**78.12%**	**Basket:**	**21.88%**	

This analysis shows basket consumption by investment mandate on a security look-through basis.

** Basket Eligible Assets are subject to the following thresholds - above which investment consumes basket capacity: 10% aggregate portfolio weight for investments in non-U.S. listed equities; 10% aggregate portfolio weight for real assets; and 10% aggregate portfolio weight for investments in high yield bonds and foreign debt issues that are registered with the SEC. To the extent that the value of investments in a particular category exceeds a threshold, the excess consumes basket capacity.*

In the above table, the investment of cash held as collateral under the system's securities lending program, is included as a Non-Basket Asset in the Cash/Equivalent line.

AUM as of June 30, 2023

		Liquid Assets		
	Current MV	**Today**	**1 Year**	**2 Years**
PUBLIC EQUITY	**$8,132**	**$8,132**	**$8,132**	**$8,132**
U.S.	5,195	5,195	5,195	5,195
EAFE Equity	1,414	1,414	1,414	1,414
Emerging Markets	1,124	1,124	1,124	1,124
Global Equity	399	399	399	399
PUBLIC FIXED INCOME	**$5,617**	**$5,535**	**$5,591**	**$5,591**
Short Term Securities	177	177	177	177
U.S. Government	2,025	2,025	2,025	2,025
Long Duration Treasury	0	0	0	0
Mortgages				
Core Mortgages	748	748	748	748
ETI	108	27	83	83
Credit - Investment Grade	750	750	750	750
Corporate - High Yield	1081	1081	1081	1081
Corporate - Bank Loans	1	1	1	1
UST - Inflation Protected	727	727	727	727
ALTERNATIVE ASSETS	**$4,996**	**$1,097**	**$1,135**	**$1,273**
Private Equity	1,746	0	0	0
Private Real Estate	1,180	0	0	0
Infrastructure	375	0	0	0
Opportunistic Fixed Income	741	556	741	741
Hedge Funds	954	541	394	532
Total Assets	**$18,745**	**$14,764**	**$14,858**	**$14,997**
Total Illiquid $		$3,981	$3,887	$3,748
Total Illiquid %		21.2%	20.7%	20.0%

Unfunded OFI Commitments	$243
Unfunded INF Commitments	$307
Unfunded PE Commitments	$1,033
Unfunded RE Commitments	$565
Total commitments $	$2,148
Total commitments %	11.5%

AUM as of June 30, 2023

Denominator Effect - Decrease AUM by One-Third

Total Illiquid $	$3,981	$3,887	$3,748
Total Illiquid %	31.9%	31.1%	30.0%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids

		Liquid Assets		
	Current MV	**Today**	**1 Year**	**2 Years**
Total Assets	**$18,745**	**$14,764**	**$14,858**	**$14,997**

Private Equity, Real Estate, Infrastructure and Opportunistic Fixed Income Stress Case

Unfunded OFI Commitments	$49	$97
Unfunded INF Commitments	$61	$123
Unfunded PE Commitments Drawn	$207	$413
Unfunded RE Commitments Drawn	$113	$226
Total commitments $	**$430**	**$859**
Total commitments %	2.3%	4.6%
Total Illiquid $	$4,317	$4,608
Total Illiquid %	23.0%	24.6%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids

Denominator Effect - Decrease AUM by One-Third

Total Illiquid $	$3,981	$4,317	$4,608
Total Illiquid %	31.9%	34.5%	36.9%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids

Additional Assumptions

Alternative Assets Liquidation Estimates: Private Equity, Private Real Estate, and Infrastructure: assumes no liquidations in 2-year horizon; Opportunistic Fixed Income: assumes 75% immediate availability and 100% availability within one year; Hedge Funds: estimates provided by consultant.

Illiquid Ratio: Illiquid investment value for each of the three time horizons as a percentage of current AUM. The ratio is calculated under three scenarios: 1) Unadjusted estimated illiquid value to current total assets. 2) Unadjusted estimated illiquid values to current total assets after a 33% decline. 3) Estimated illiquid value after Fixed Income Stress Case to current total assets after a 33% decline.
Unfunded Commitments: Uses custodian value at month end.
Denominator Effect: Measures Illiquid Ratio for each time horizon after an assumed 33% decline in portfolio value.
Fixed Income Stress Case: Measures impact of new commitments to illiquid asset classes assuming no capital calls and a level 5-year pacing schedule.